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ABSTRACT

This fourth grade curriculum guide for health education follows the Duval County Public Schools (Jacksonville, Florida) comprehensive program for K-12 that aims to help students gain an intelligent understanding of health as a unity of physical, mental, and social well-being. The guide deals with three primary ideas: (1) the human body has a basic structure and function; (2) development in individuals may be altered by factors in the environment; and (3) the quality of human health may be improved by the cooperative efforts of men and women. Each lesson plan includes concepts/skills (to be taught), test references, estimated teaching time, objectives, instructional materials, teaching procedures, evaluation procedures, and enrichment and reinforcement activities. (CMG)

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PHYSICAL • MENTAL • SOCIAL

HEALTH

DUVAL COUNTY COMPREHENSIVE HEALTH EDUCATION PROGRAM

GRADE 4

UT 023 118

DUVAL COUNTY PUBLIC SCHOOLS
JACKSONVILLE, FLORIDA
Herb A. Sang, Superintendent

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HEALTH EDUCATION CURRICULUM GUIDE

ELEMENTARY SCHOOL

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APPENDIX A - CURRICULUM

DUVAL COUNTY SCHOOL BOARD POLICY

Sec. 2-6. Health Education

Proper procedures will be implemented to assure that all students, kindergarten through twelve (12), receive a comprehensive health education program. Students may be exempted for religious reasons without being penalized. The health education curriculum shall include a drug education program as required by the state. Units of instruction regarding human reproduction must be approved by written parental permission two (2) weeks prior to the presentation. Students will be excused from such instruction without penalty with parental request.

Source: 1975 Rules, IJL.

Annotations
Comprehensive Health Education Act of 1973, F.S. 233.067.

INTRODUCTION

The health education curriculum is designed as a comprehensive program (K-12). The curriculum is designed to assist the student in gaining an intelligent understanding of health as a unity of man's physical, mental, and social well being.

The student should be able to:

(a) Understand himself and others in terms of physical, mental, social, and moral well being.

(b) Apply the scientific approach and critical reasoning to make intelligent decisions concerning individual and community health.

(c) Develop criteria for identifying reliable sources of information regarding health products and services.

(d) Interpret man's relationship to his environment and his use of his environment to attain a better state of health.

The comprehensive health program offers topics at the student's maturity level involving the physical, mental and social aspects of the individual. Course content includes study of interacting growth and development, personal health practices, protection and promotion of health, food selection, utilization of health information, contagious diseases, hazards and accidents, community health and substances that modify mood and behavior (drug education). The program utilizes a variety of teaching techniques in order to influence knowledge, habits, attitudes and values, relating to the favorable decisions about individual, family and community health. To meet

individual needs a wide variety of material has been identified in the method/media for each objective.

Health education is an important part of the total elementary, junior and senior high school curriculum. The health education course is required at grade levels K-6 and grade eight. The senior high student has the opportunity to elect health education at grade levels ten, eleven and twelve. All health courses have criterion referenced tests.

GRADE LEVEL: Fourth

THEME: Physical, Mental, and Social Health

PRIMARY IDEA: 1.0 The human body has a basic structure and function.

SECONDARY IDEAS	OBJECTIVES
4 - 1.1 Organs of the body function in harmony.	To demonstrate knowledge of body organs, students will do the following: 4 - 1.1.1 identify names, shapes, sizes and location of various organs of the body; 4 - 1.1.2 describe the function of the organs in the body; 4 - 1.1.3 explain the interrelationship of organs and; 4 - 1.1.4 compare how feelings and organs are affected by each other.

LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Organs of the body	4.V.1, 4.C.9	45 minutes

OBJECTIVE 4 - 1.1.1 Identify names, shapes, sizes and location of various organs of the body.

INSTRUCTIONAL MATERIALS:

Kit: SVE, Slim Goodbody - Your Body, Health & Feelings, (available in your media center.)
Filmstrip: "The Inside Story " (words to song in filmstrip provided)
Poster: "Human Body"
Measuring tape
3M Company, School Health Education Study, Concept I, Level II-B
"Transparency A." (Master included, set available in your media center).

PROCEDURES:

Show "Transparency A." Have students name which body part they think is the most important. After their answers are given, tell them they are going to find out more information about the importance of our body parts by taking a tour with Slim Goodbody through the human body.

Show filmstrip. Use the suggested questions to stimulate discussion.
What are some organs Slim Goodbody introduced to you?
Why are these organs so important?
Why did Slim Goodbody call our body a symphony?

EVALUATION:

Discuss vocabulary words from filmstrip. Include words such as:

flow	arteries	symphony	harmony
exhale	lungs	large intestine	stomach
liver	esophagus	small intestine	brain
inhale	veins	heart	trachea

Have students place their hand over the location of each organ as it is discussed. Check to make sure students have their hands in the correct position as the organ is identified.

OBJECTIVE 4 - 1.1.1

ENRICHMENT/REINFORCEMENT:

Place "Human Body Poster" on a wall or chalkboard at eye level. Use the suggested questions to stimulate discussion.

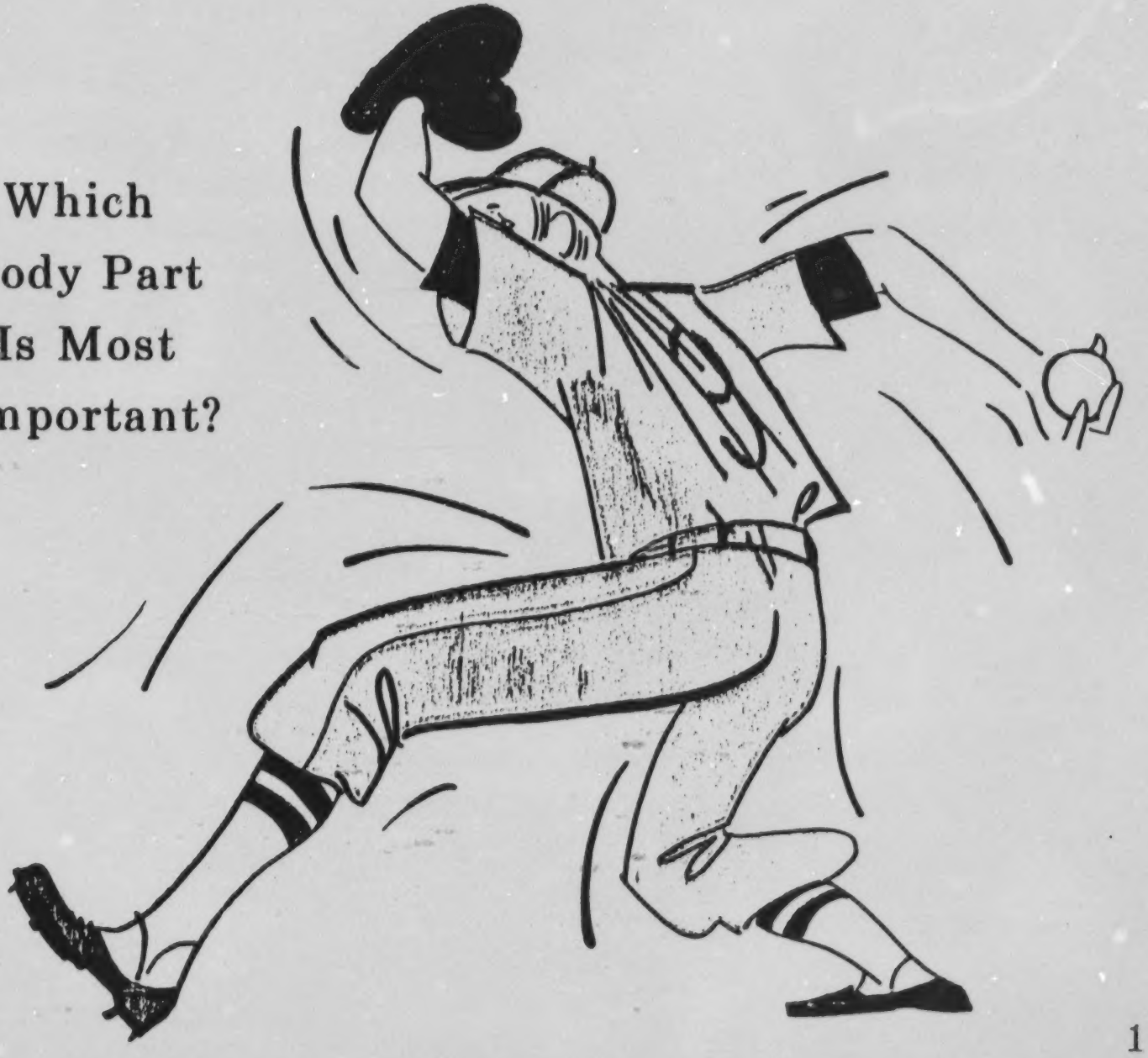
What is a model?
What things can you think of that are models of something?
What is the poster a model of?
Is this the way people really look from the outside?
What is different?
How do you suppose we discovered how the inside of our bodies look?

Have students measure Slim Goodbody with the measuring tape. Ask students if he is taller or shorter than a full-grown person.

Have students learn the song, "The Inside Story." Words may be sung along with the tape. A copy may be provided for each student or written on a chart or chalkboard.

Transparency A Objective 4 - 1.1.1

Which
Body Part
Is Most
Important?



OBJECTIVE 4 - 1.1.1

Song

"The Inside Story"

Slim Goodbody is my name,
And I am going to explain

Exactly what goes on inside you.

Sit back, relax, and I will guide you.

We're going on a tour.
We're going to explore.
Your fascinating body
From the inside out,

To learn about,
A lot of things you may have never,
Ever, known before.

First of all, let's begin with skin.
It wraps us up, and keeps us in.
From our heads down to our feet.

Now, let's take a look at what's underneath.

Inside your chest, is the mighty heart,
Which pumps the blood to every part.

Blood flows through two different lanes.
It goes out through the arteries,
Comes back through the veins.

Around the heart, there is a pair
Of lungs which breathe the air.

The air flows in through the trachea,
Which is the tube that lies right there.

Later on, we will discuss
The stomach, liver and esophagus.

As well as the small and large intestine,
When we talk about food digestion.

Believe it or not, we're still not through.
There's even more inside of you.

OBJECTIVE 4 - 1.1.1

Bones protect our softer parts:
Our lungs, our brains and our hearts.

Bones hold us up,
So we don't fall down.

And muscles move those bones around.

And now it's time
To explain
That the leader of it all
Is the Big Boss Brain.

Always working, never shirking,
Night and day, at work or play,
It's making sure that everything is running A-O.K.

Step right up and shout it loud.
My body is great and I am proud,
There's no one else I'd rather be.

I enjoy the pleasure.
My pleasure I can't measure.
It really is a pleasure being me.

Your body is incredible.
It's busy every minute.
Amazing things are happening.
To keep you living in it.

Your heart is beating.
Lungs are breathing
And your body's growing.

Your mind is thinking.
Your eyes are blinking,
And your blood is flowing.

Each part has its own job to do,
But they all work in harmony
Creating the music which I call The Body Symphony.

OBJECTIVE 4 - 1.1.1

There are only two things you have to do,
If you want to hear.
Use your imagination,
And tune in with your inner ear.

Let's start by listening to the heart.
That ba-bum sounds like a drum.

Blood is flowing through you,
Reaching every part.
It's like a rushing, racing, River of Life
Pumped by your heart.

Your lungs inhale, your lungs exhale,
Sounding like winds you might hear in a gale.

Every few seconds, you can hear a swallow.
A whistle that starts high and ends below.

When you hear the next rumbling,
Don't be concerned.
It's the food in our stomach being churned.
It sounds like something being tossed and turned.

Listen to this. What do you think?
It's the close-up sound of an eye blink.

All these parts are being led
By the Brilliant Brain inside your head.

Sounds like these go on all the time;
In your body and in mine.
But that's not all your body can do.
Let's talk about something new.

Dangling down at the end of your arms
Are a couple of helping hands.

Hands are great for making friends.
Shake hands with the person sitting next to you.

Now stop.
Put your hands in front of you and think about this.

OBJECTIVE 4 - 1.1.1

Your hands pick up, put down, peel cucumbers.

Clutch, touch,
Dial your best friend's telephone number.
Dig a ditch.
Catch a fish.

You can even scratch an itch,
With your helping hands.

And what would music be like without your hands?
Everybody pick up an imaginary guitar and do some strumming.

In rock and roll, hands play the bass and do the drumming.
Pretend you're playing with me.

When you were a baby, fine and small,
You used your hands to eat and crawl.

But now you've grown older, and you can stand.
There are so many more things you can do with your hands.

Everybody, look at your hands.
They help you every day in a thousand ways.
Everybody, look at your hands and say,
"Thank you, hands!"

Your hands hold the soap to wash your face.

With your hands you tie up your shoelace.

Type a letter, knit a sweater.
In the world, there's no tool better,
Than your helping hands.
And your hands are at your brain's command.

Hands love to clap.
Everybody clap with me.
Clap, clap, clap, clap, clap, clap.

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LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Shapes and Location of Organs	4.V.1, 4.C.9	45 minutes

OBJECTIVE 4 - 1.1.1 Identify names, shapes, sizes, and location of various organs of the body.

INSTRUCTIONAL MATERIALS:

Kit: SVE, Slim Goodbody - Your Body, Health & Feelings. (available in your media center)
Poster: "Human Body"
Organ "Limpys"
Tape measure
One-litre milk carton
Manila drawing paper
Crayons

PROCEDURES:

Review the definition of a model. Then hold up one or two of the "Limpys" and ask what they are.

One by one, hold up each "Limpy " and use the following questions to stimulate discussion:
What is it shaped like?
What does it remind you of?
Which organ is the largest?
Which organ is the smallest?
Which is larger the stomach or the heart? The liver or the lung?

Pass the heart around. Ask students to compare its size with that of something familiar to them. Then show the students that the heart is about the size of your (the teacher's) fist. Is it the same size as your fists? Probably not. Do the same for the other organs. Show that the liver is about the same size as your open hand. Hold up the one-litre milk carton and say that the stomach holds a little less than this.

Have students use the tape to measure the organs shown on the "Limpys."

Review the names of the organs shown on the "Limpys." Then hold up each "Limpy" and have students identify the organ.

OBJECTIVE 4 - 1.1.1

EVALUATION:

Review vocabulary words with students. Include words such as:

lung	large intestine
heart	small intestine
liver	stomach

Have the students trace around each "Limpy" or draw the organs freehand, and color them. Then have them cut out and label their drawings.

ENRICHMENT/REINFORCEMENT:

Place "Human Body Poster" on a wall or chalkboard at eye level. Have students place "Limpys" in proper location on poster.

Suggest that students look up organs in the encyclopedia at school or at home. Have them share with the class any information they find.

LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Organ Functions	4.V.1, 4.C.8	45 minutes

OBJECTIVE 4 - 1.1.2 Describe the function of the organs of the body.

INSTRUCTIONAL MATERIALS:

Kit: SVE, Slim Goodbody - Your Body Health & Feelings. (available in your media center)
Poster: "Human Body"
Organ "Limpys"
Activity Sheets 4, 7, and 13 (masters included)
Drawing of Human Body (Master included, make a copy for each student)

PROCEDURES:

Hold up each organ "Limpy" and have the students name the organ it represents and give the function of each organ as it is held up. After discussing each organ have a student place it on the Human Body Poster.

NOTE: The liver may be the most difficult. It does a number of things, but with which students cannot have the direct experience that the heart or lungs offer, for example -- they can hear their heart and feel their lungs working. Explain that the liver stores vitamins and minerals, turns sugars into starch, and aids with digestion.

EVALUATION:

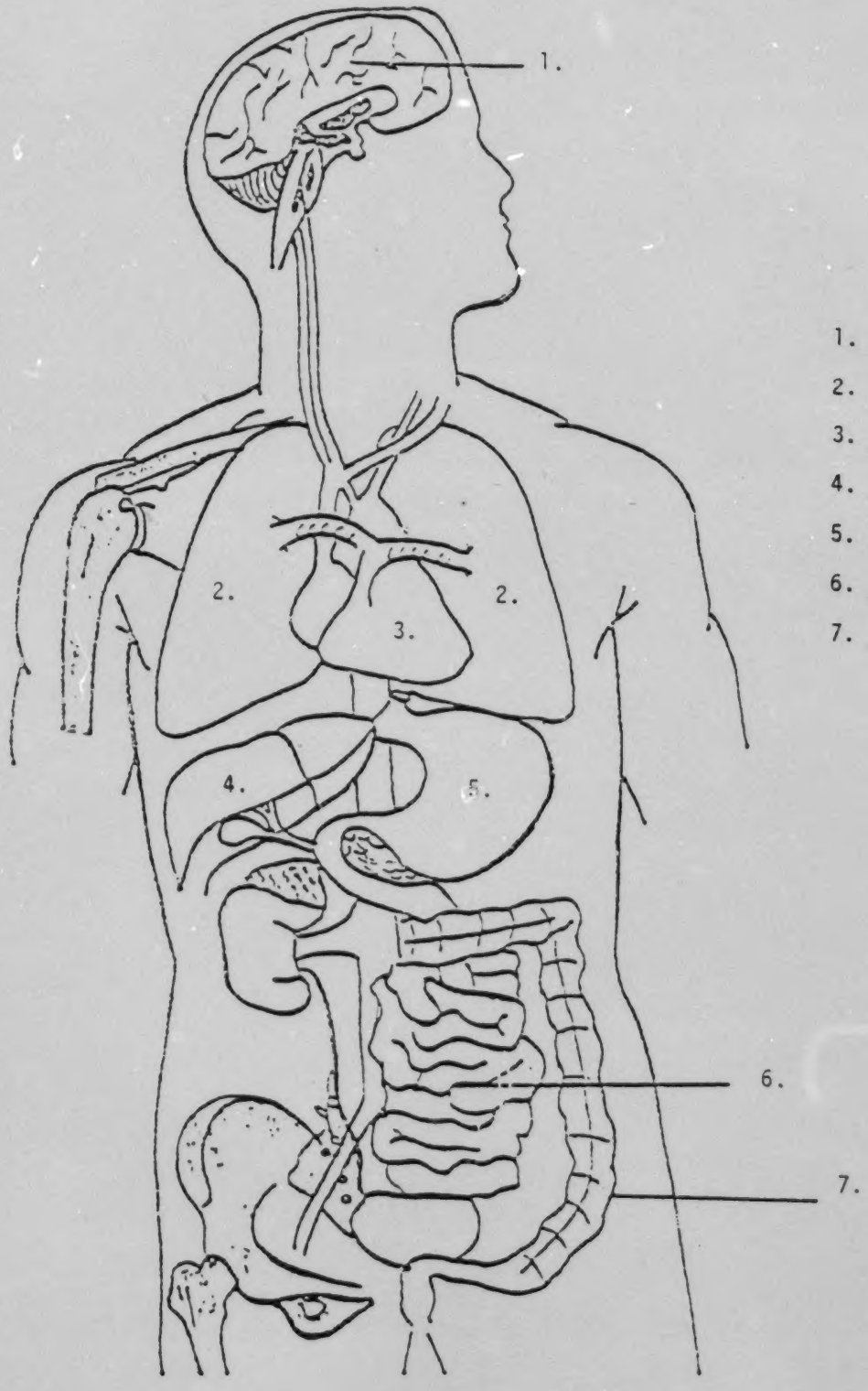
Discuss and review vocabulary words.

heart	stomach	brain
lungs	large intestine	
liver	small intestine	

Give students a drawing of the human body. Have students label the parts and write a brief description of the function of each.

ENRICHMENT/REINFORCEMENT:

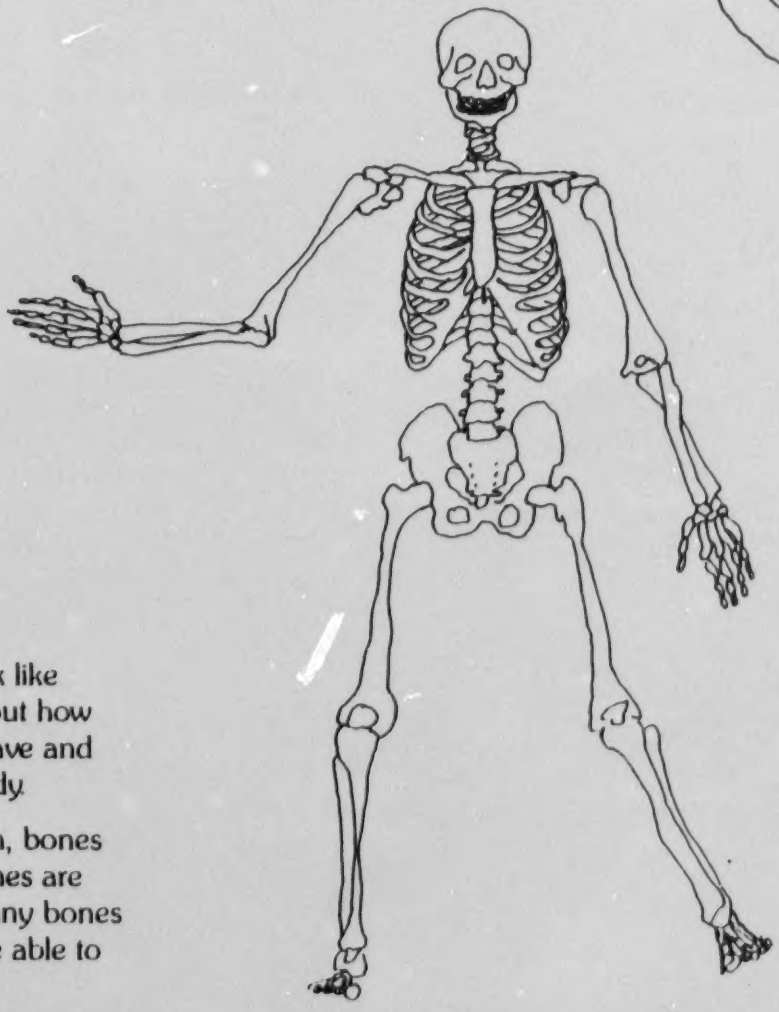
Divide class into three groups and distribute Activity Sheets 4, 7, and 13. (1 Activity Sheet per group.) Have groups work each activity. After a 10-minute period, have groups exchange activities.



1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

YOUR OWN BONES

4



I want you to know
your bones are great.
They hold you up,
and keep you straight.
Have you ever thought
that without a skeleton
Your body would be like
jello gelatin?

Part 1 ☆ Imagine what your body would look like without bones to hold it up. Then act out how you would sit, stand, run, walk, eat, wave and shake hands without bones in your body.

Part 2 ☆ Except for the enamel on your teeth, bones are the hardest parts of your body. Bones are underneath your skin. Try to feel as many bones as you can. Talk about where you were able to feel these bones.

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THE SENSATIONAL SENSE OF SIGHT

7

The world is filled
with beautiful sights.
Sparkling clear days
and warm dark nights.
Twinkling stars that
fade at sunrise.
And you can see it all,
when you open your eyes.

☆ Play the game "How many things I can see in a minute." Pick a partner who watches the clock while you look around the room and name all the different things you can see in a minute. Then, you and your partner trade places and have your partner name, in one minute, things that he or she can see that you did not name. Continue playing the game until you have named everything both of you can see.

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SOUNDS: THE MUSIC OF LIFE

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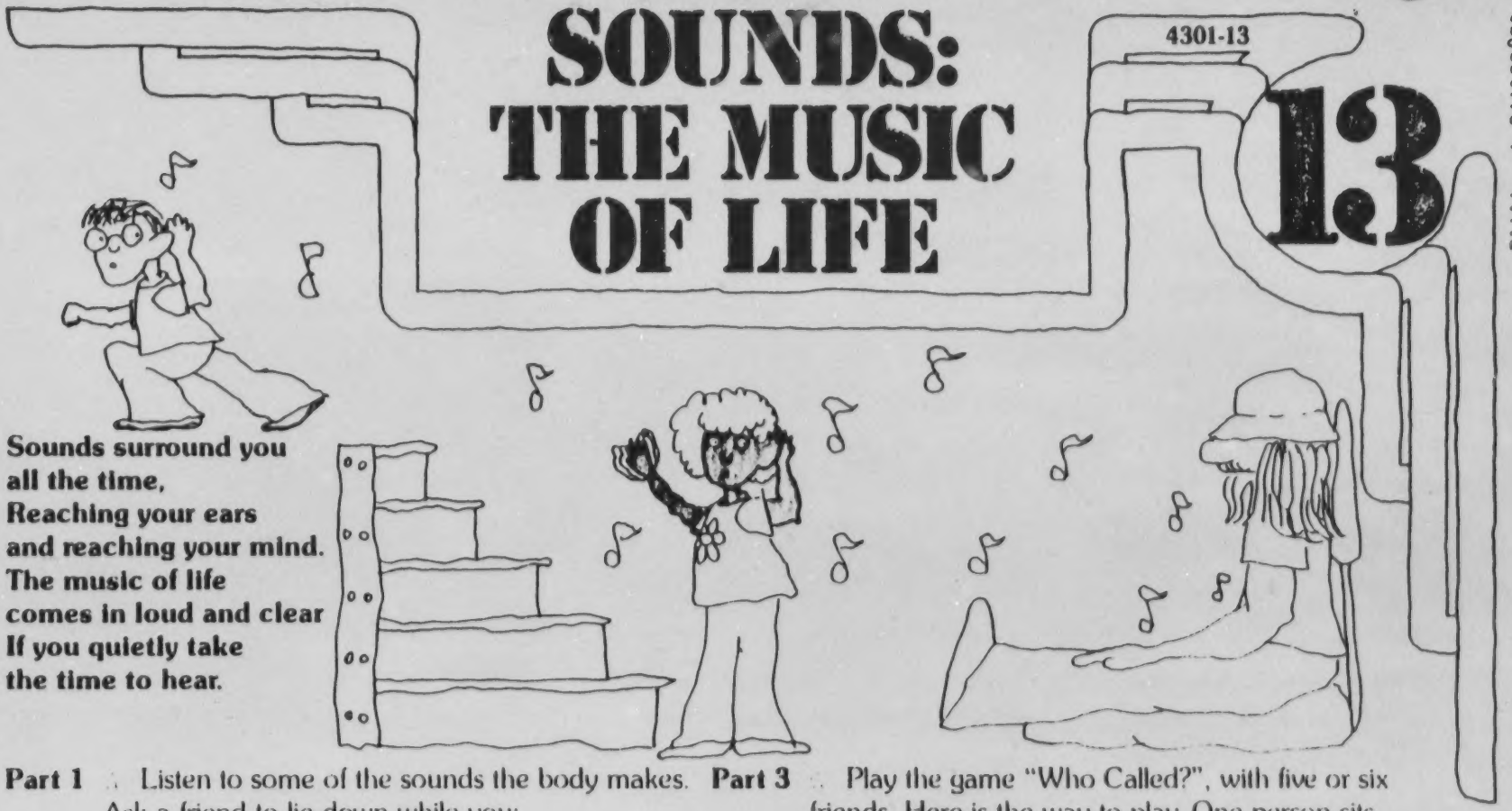

Sounds surround you
all the time,
Reaching your ears
and reaching your mind.
The music of life
comes in loud and clear
If you quietly take
the time to hear.

Part 1 ☆ Listen to some of the sounds the body makes. Ask a friend to lie down while you:

- Listen to the heart beating.
- Listen to the person breathing.
- Listen to the sounds of food being digested in the stomach.

What other sounds can you hear?

Part 2 ☆ Think up ten sounds you can make with different parts of your body. Then make those sounds. Some body parts you can use are: hands, teeth, tongue, lips, feet and nose.

Part 3 ☆ Play the game "Who Called?", with five or six friends. Here is the way to play. One person sits blindfolded in the center of the circle. Someone calls out a quick **"Hello!"**, and nothing more. It is now up to the person in the center to guess who called. If the person in the center guesses right, he or she goes to the outside of the circle and the person who was named moves into the center. Play begins again.

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LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Organ Functions	4.C.2, 4.C.7	Four, 45-minute lessons

OBJECTIVE 4 - 1.1.2 Describe the function of the organs in the body.

INSTRUCTIONAL MATERIALS:

Kit: SVE, Slim Goodbody - Your Body, Health & Feelings (available in your media center)
Activity Sheets: #8 "Sweet Heart"
#16 "Lovely Lungs"
#22 "The Brillant Brain"
Filmstrip Series: Eyegate, How Your Body Parts Function
Filmstrip: Part I: "The Brain"
"The Heart"
Part II: "The Lungs and Larynx"
Evaluation Sheets (Masters included, questions available at the end of each filmstrip.)

PROCEDURES:

Set up four learning centers. Three learning centers will involve the use of filmstrips. The following materials will be needed: filmstrip previewer, cassette player, earphones, and evaluation sheets. The fourth learning center will involve Slim Goodbody Activity Sheets.

Filmstrip Learning Centers:
I: "The Brain"
II: "The Heart"
III: "The Lungs and Larynx"

Activity Learning Center:
IV: Slim Goodbody Activities

Today we are going to learn about some major organs of the body. We will divide into four groups. In the first three learning centers, you are going to view filmstrips and answer questions at the end of each one. In the fourth learning center, you are going to do activities with Slim Goodbody. This will continue for four days until you have completed each learning center.

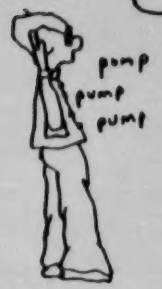
EVALUATION:

Following the viewing of each filmstrip, students are to answer questions for review and then check their answers by finding them in the filmstrip. Completion of activity sheets will serve as an evaluation for the Slim Goodbody learning center.

ENRICHMENT/REINFORCEMENT:

Have students research more information on these organs at home or in the media center. Have them share with the class any information found.

SWEET HEART



I know a way
that's really neat
To listen to a friend's
heartbeat.

Part 1 ☆ Make your own stethoscope. Roll up a sheet of paper like this (illustration) or use a paper towel roll. Color your stethoscope in your favorite color.
☆ Now put one end of the stethoscope to your friend's chest and the other end to your ear. Listen for the heartbeat. Move your stethoscope around until you hear the heartbeat loud and clear. Your friend's heart will be right underneath.

Part 2 ☆ Using your stethoscope, count how many times your friend's heart beats in a minute. Write it down using a crayon. Now, have your friend jump up and down quickly twenty times. Listen to the heart again and count how many times it beats in a minute. Write this number next to the first.

Before exercise _____ After exercise _____

What is different about the way the heart beats before and after exercise?

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LOVELY LUNGS

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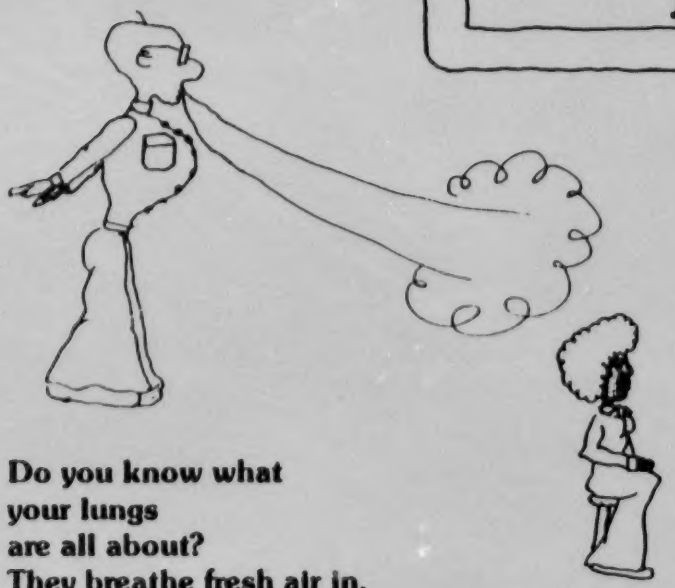
Objective 4 - 1.1.2



Do you know what your lungs are all about? They breathe fresh air in, and breathe used air out.

Part 1 ☆ Color in this picture of the lungs.

Part 2 ☆ Ask a friend to sit quietly for a minute. Then put your ear to his or her chest and count how many breaths he or she takes in a minute. Write that number here: _____ breaths.

☆ Now ask your friend to run up and down in place for a minute and then count the breaths again. Write that number here: _____ breaths. What does this tell you about exercise and breathing?

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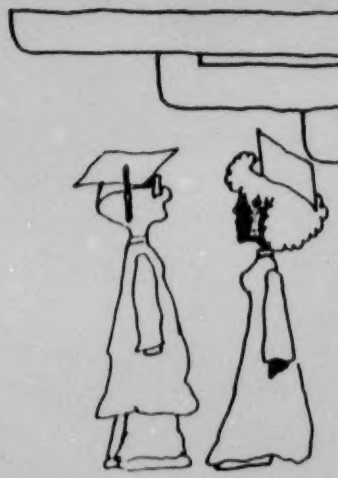


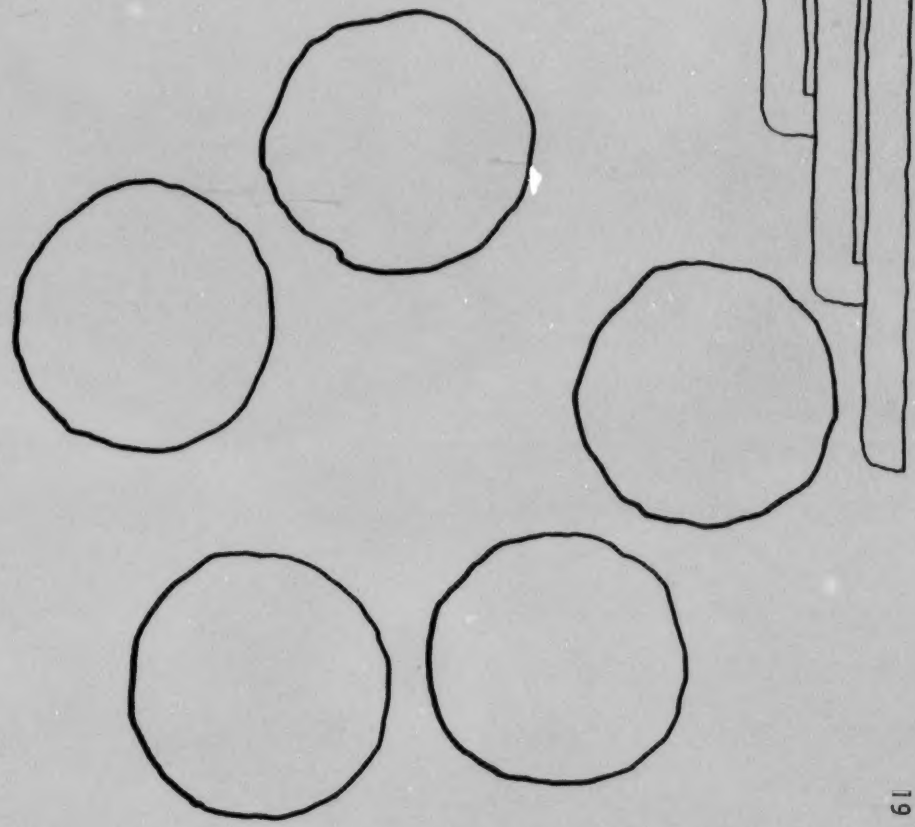
THE BRILLIANT BRAIN

4301-22

22

Objective 4 - 1.1.2

Your big boss brain does a lot for you.
It keeps on learning your whole life through.
It will never get filled, or overflow—
The older you get,
the more you'll know.



☆ You can build a better memory by practicing. For this activity you will need a friend and some paper clips, chalk, crayon, eraser and pennies.

☆ There are five circles on this activity card. Close your eyes and have your friend place the different items in different circles. Then open your eyes, look at the activity card, but only for a minute. Now close your eyes again.

☆ Let your friend cover this activity card with a sheet of blank paper. Then open your eyes. See if you can remember where everything was placed. Keep practicing until you can remember exactly where each item was placed.

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OBJECTIVE 4 - 1.1.2

"The Brain"

Questions for Review

Choose a word or words from the Word Bank to complete the following sentences.

Word Bank:

cerebrum	skull
cerebellum	left
brain stem	right
nerve fibers	

1. The brain is located in a hard-bone case in our head called the _____.
2. The largest and most wrinkled part of the brain is called the _____.
3. The left half of the cerebrum controls the _____ half of the body.
4. The right half of the cerebrum controls the _____ half of the body.
5. Beneath the cerebrum is another part of the brain called the _____.
6. The _____ connects the brain to the spinal cord.
7. The brain uses _____ to send messages through the spinal cord to and from all parts of the body.
8. Thinking, learning, and memory are done in the front, middle, and sides of the _____.
9. Hearing and seeing are done in the _____.
10. What are the three main parts of the brain?

Key:

1. skull
2. cerebrum
3. right
4. left
5. cerebellum
6. brain stem
7. nerve fibers
8. cerebrum
9. cerebrum
10. cerebrum
    cerebellum
    brain stem

OBJECTIVE 4 - 1.1.2

"The Heart"

Questions for Review

Choose a word from the Word Bank to complete the following sentences.

Word Bank:

pump blood	your lungs
rib cage	all organs
carbon dioxide	ventricles
oxygen	atria
fist	pulse

1. The most important job of the heart is to _____.
2. The heart is located right under the _____ between the lungs.
3. The heart is about the size of your _____.
4. When the heart muscles squeeze blood out, a beat is caused which we can feel called the _____.
5. The top two portions of the heart are called _____.
6. The bottom two portions of the heart are called _____.
7. The left ventricle pumps blood to _____ _____.
8. The right ventricle pumps blood to _____ _____.
9. Do all portions of the heart work at the same time _____?
10. The heart pumps blood into the lungs so that it can get rid of _____ _____ and get more _____.

Key:

1. pump blood
2. rib cage
3. fist
4. pulse
5. atria
6. ventricles
7. all organs
8. your lungs
9. no
10. carbon dioxide
    oxygen

OBJECTIVE 4 - 1.1.2

"The Lungs"

Questions for Review

Choose a word or words from the Word Bank to complete the following sentences.

Word Bank:

nose	windpipe	carbon dioxide
throat	air sacs	vocal chords
rib cage	diaphragm	
lungs	body	

1. The lungs are located in the chest and are protected by the _____.
2. It is healthier to breathe through your _____ because its tiny hairs help clean dirt out of the air.
3. The moist lining of the nose adds water to the air, which keeps the back of the _____ from getting dry and sore.
4. When air is breathed in, it leaves the throat and enters a tube in front of the neck called the _____.
5. From the windpipe the air travels into two slightly smaller tubes in the center of the chest and finally into the _____.
6. The air from the windpipe travels through smaller and smaller branching tubes until it reaches the _____.
7. The air is sucked in and squeezed out of the lungs by the rib cage and a flat muscle underneath the lungs called the _____.
8. By breathing, the lungs supply oxygen to the _____.
9. During breathing, the lungs take _____ that the cells produce out of the blood.
10. When we talk, air is taken into the lungs and then slowly squeezed out through the _____ at the top of the windpipe.

Key:

1. rib cage	5. lungs	9. carbon dioxide
2. nose	6. air sacs	10. vocal cords
3. throat	7. diaphragm	
4. windpipe	8. body	

LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Interrelationship of Organs	4.C.8	45 minutes

OBJECTIVE 4 - 1.1.3 Explain the interrelationship of organs.

INSTRUCTIONAL MATERIALS:

Kit: SVE, Slim Goodbody - Your Body, Health & Feelings.
Poster: "Human Body"
Organ "Limpys"
Paper, crayons

PROCEDURES:

Place human body chart at eye level and use the following information as a discussion guide. Which organs are connected? Give a child the "Limpys" for the organs that are connected (for example, those of the digestive system) and see if the child can put those "Limpys" together without using the Poster as a guideline. The correct order is: esophagus, stomach, small intestine, and large intestine. Why are these organs connected? What does each organ in the series do?

Hold up the brain "Limpy." What does the brain do? Then hold up the heart "Limpy" along with the brain. What does the heart do for the brain? (Gives it blood, which contains oxygen and food.) What does the brain do for the heart? (Sends it messages to keep beating.) How does the brain help the lungs? How do the lungs help the brain? How does the brain help the stomach? How does the stomach help the brain? What do the hands and the stomach do for each other?

What do the heart and the intestines do together? (Remember that the small intestine helps food to pass into the bloodstream, that the heart pumps blood throughout the body, and that the blood carries dissolved food to all parts of the body.)

How is the heart connected to the lungs? What might they do together? How is the heart connected to the intestines? (Blood vessels)

EVALUATION:

Have students give on paper an example of an organ cooperating with another organ.

OBJECTIVE 4 - 1.1.3

ENRICHMENT/REINFORCEMENT:

Compose a symphony of the body organs working together, by recording on a cassette recorder sounds of different organs. Create the sounds by using objects and voices the students think of that are similar to the actual sound of the organ.

LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Interrelationship of Organs	4.C.7	45 minutes

OBJECTIVE 4 - 1.1.3 Explain the interrelationship of organs.

INSTRUCTIONAL MATERIALS:

Kit: SVE, Slim Goodbody - Your Body, Health & Feelings
Poster: "Human Body"
3M Company, School Health Education Study, Concept I, Level II-B, "Transparencies B, C, D, E, H, I, & J." (Masters included, set available in your media center.)

PROCEDURES:

Show transparencies and use suggested questions to stimulate discussion. Point to the organs on the human body poster as questions are answered.

Transparency B
Can you name several organs that work together to perform a function in the body?
How does the heart help the lungs?
Discuss other combinations: lungs-brain, liver-stomach, hand-stomach, brain-hand, brain-spinal cord, skin-brain, stomach-heart, small intestine-heart, brain-stomach, etc.

Transparency C
How do the ribs help the lungs? (by expanding and contracting during breathing, and by providing a protective frame.)
How does the spinal column help the heart? (by sending messages from the brain for the heart to beat.)

Transparency D
How do our muscles get the energy to do work? (from stored food energy.)
Does the liver help the body to have energy? (yes, from storing food in the form of glycogen in the muscles, and from releasing stored glycogen in the liver when needed.)
How does the circulatory system help us to have energy? (by carrying food in the blood to all parts of the body.)

Transparency E
Oxygen is carried to all parts of the body by what organ?
What organ helps the body to breathe in oxygen and to breathe out carbon dioxide?
What two systems work together to give the body oxygen for energy? (Respiratory and Circulatory)

OBJECTIVE 4 - 1.1.3 Explain the interrelationship of organs.

Transparency H
How would the ears bring information to help the body meet its needs?
How would the ears help the body in this emergency?
What organs would work together?

Transparency I
How would the eyes help the total organism?
How would the eyes help the girl in this situation?

Transparency J
How do the hands work with the body to do different tasks?
How do they work with the brain, the stomach, the eyes, etc?

EVALUATION:

Have students draw a picture showing an incident where organs worked together to meet the body's need.

ENRICHMENT/REINFORCEMENT:

Have students present to the class an oral interpretation of pictures drawn for evaluation.

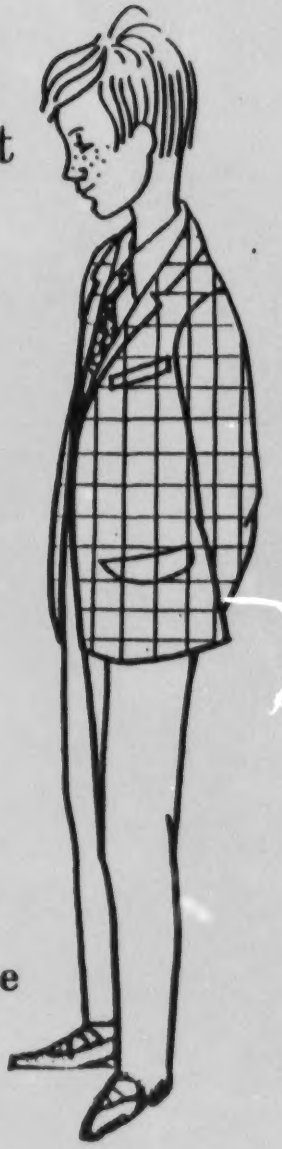
The Human Body Depends on Balanced Function of Every Part

Organs

Brain	Stomach	Skin
Spinal Cord	Liver	Lungs
Hand	Kidney	Heart

Systems

Skeletal	Digestive	Respiratory
Muscular	Circulatory	Endocrine
Nervous	Excretory	Reproductive



Transparency B Objective 4 - 1.1.3

Transparency C Objective 4 - 1.1.3

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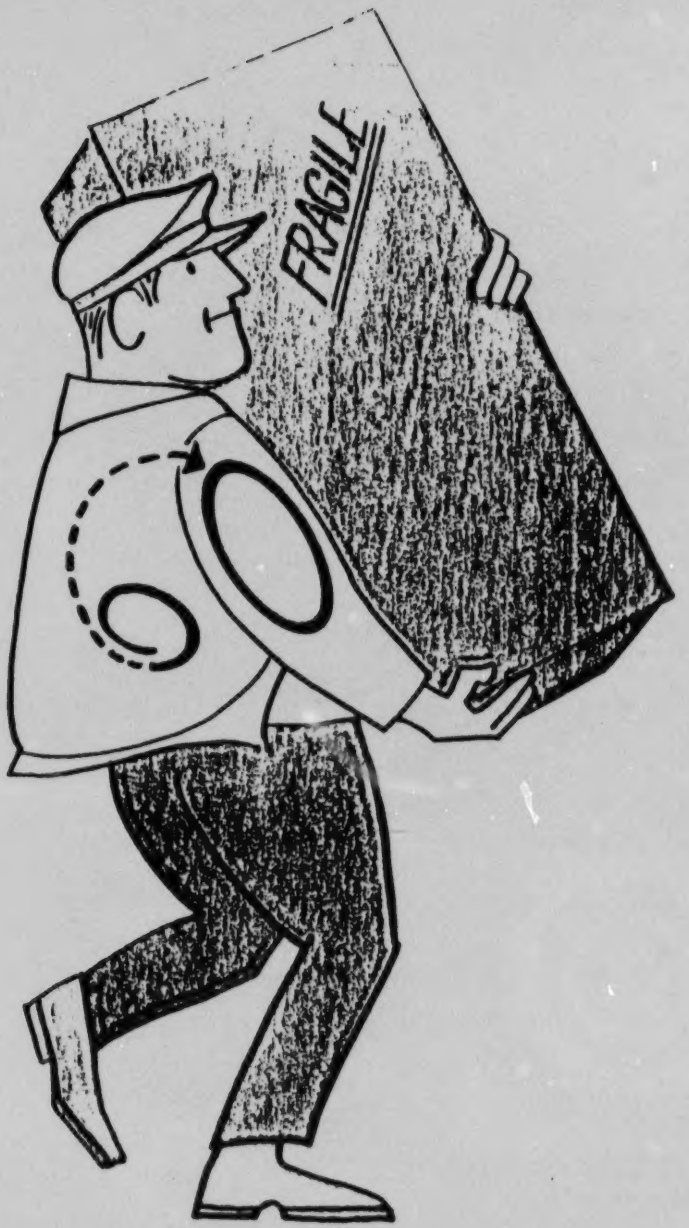
Human Energy Depends on Body Systems

Muscle

Circulatory

Liver



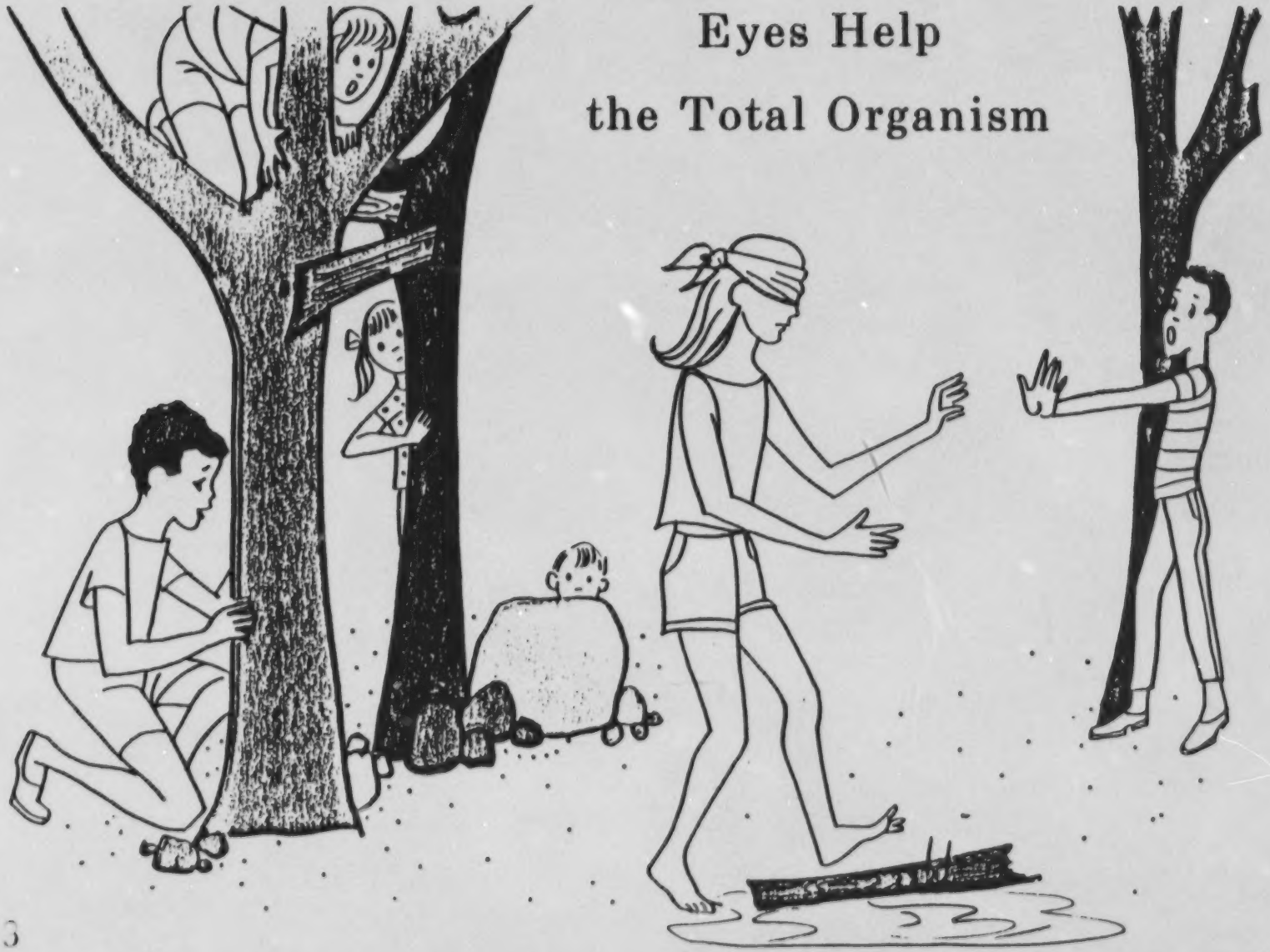
Transparency D Objective 4 - 1.1.3

Transparency E Objective 4 - 1.1.3

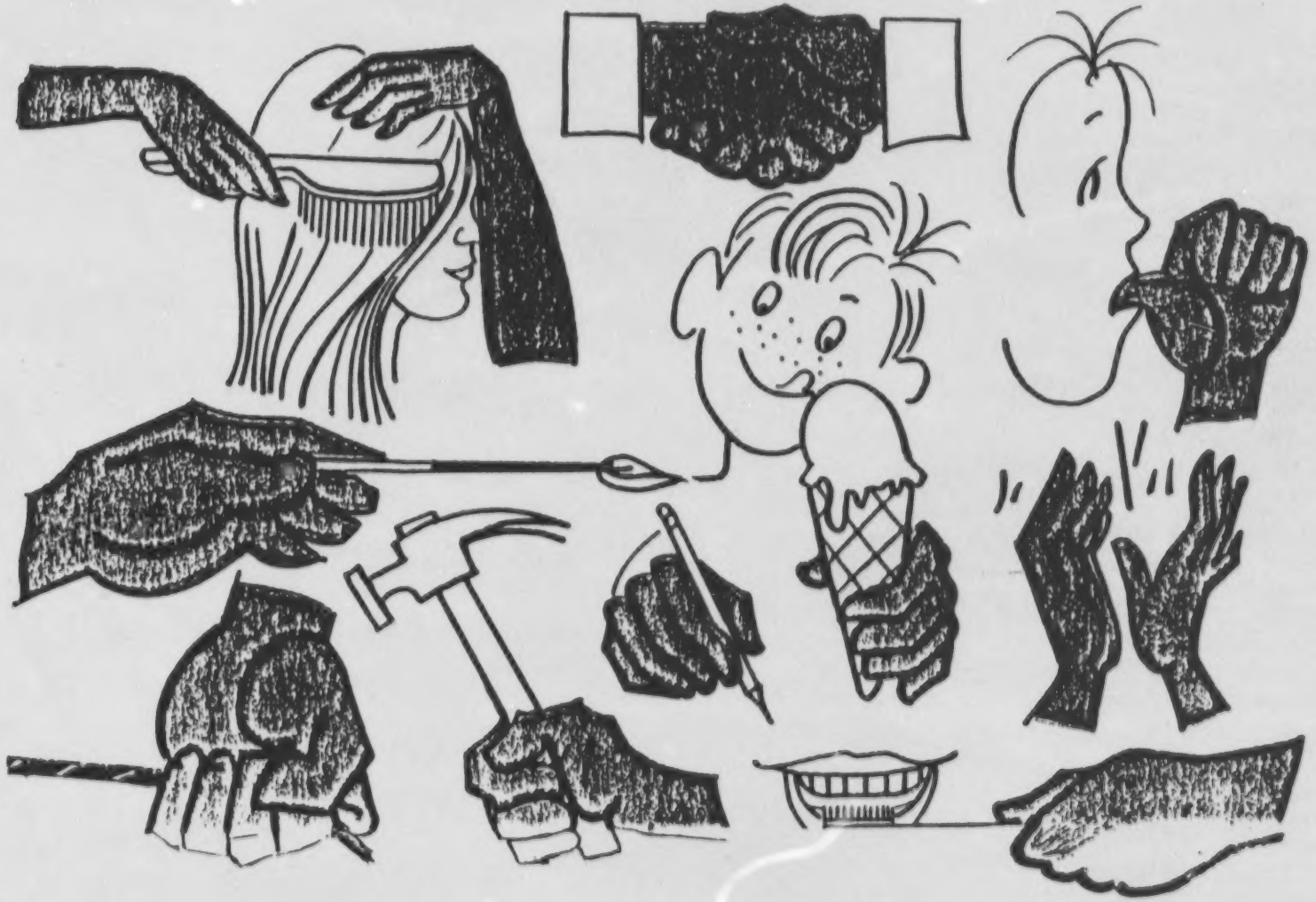
Body Energy Requires Oxygen

Ears Bring Information to Help the Body Meet Its Needs

Eyes Help the Total Organism



The Body Depends on Hands in Many Ways



LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Feelings	4.C.7	45 minutes

OBJECTIVE 4 - 1.1.4 Compare how feelings and organs are affected by each other.

INSTRUCTIONAL MATERIALS:

Kit: SVE, Slim Goodbody - Your Body, Health & Feelings. (available in your media center)
Activity Sheets 1, 5 (Master included, make a copy for each student)
3M Company, School Health Education Study, Concept I, Level II-B, "Transparencies K, L, M, N, O," (Masters included, set available in your media center.)
Drawing Paper
Crayons

PROCEDURES:

Show transparencies and use suggested questions to stimulate discussion

Transparency K
Have you ever been scared or frightened by something?
What happened to your body?
Can you think of some organs that were affected by your emotions?
Why do you think our bodies are affected when we are scared or frightened?

Transparency L
Have you ever come to school when you weren't feeling well?
How did it affect the way you studied or learned that day.
Why do you think it is harder to study and learn when you don't feel well?

Transparency M
Is it harder to study when your mind is on other things?
What does your body feel like when it is bored? Tired?
Can you keep your mind on your studies when you are tired?
Have you ever tried to study when you are upset? What happened?

Transparency N
Should you go to school when you have a cold?
What if you want to be with friends and talk?
Does it make you unhappy when you have to stay home and rest because you don't feel well?
Can you think of another way being ill affects having fun with friends?

OBJECTIVE 4 - 1.1.4

Transparency 0
How does being unhappy affect your appetite?
Do you like to eat when you are arguing with your brother or sister?
What things do you like to do when you are eating?
What do you think happens to the body that makes your appetite go away when you are upset or unhappy?
Do you ever eat just because you are upset or unhappy?

EVALUATION:

Have students draw a picture showing how feelings and organs are affected by each other.

ENRICHMENT/REINFORCEMENT:

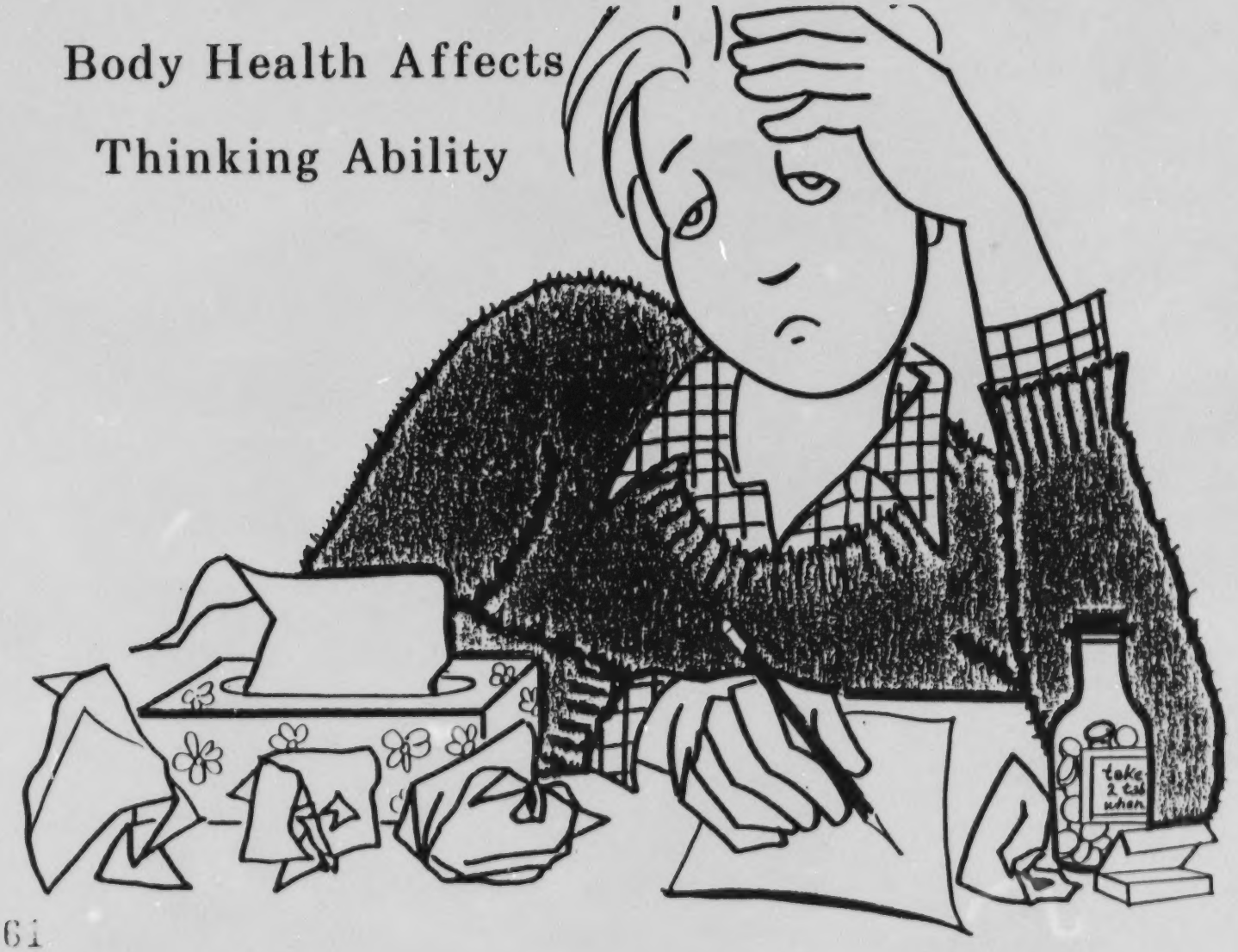
Distribute Activity Sheet 1. Have students volunteer to demonstrate how they use their bodies to talk with each of the suggestions in Part II of the Activity Sheet.

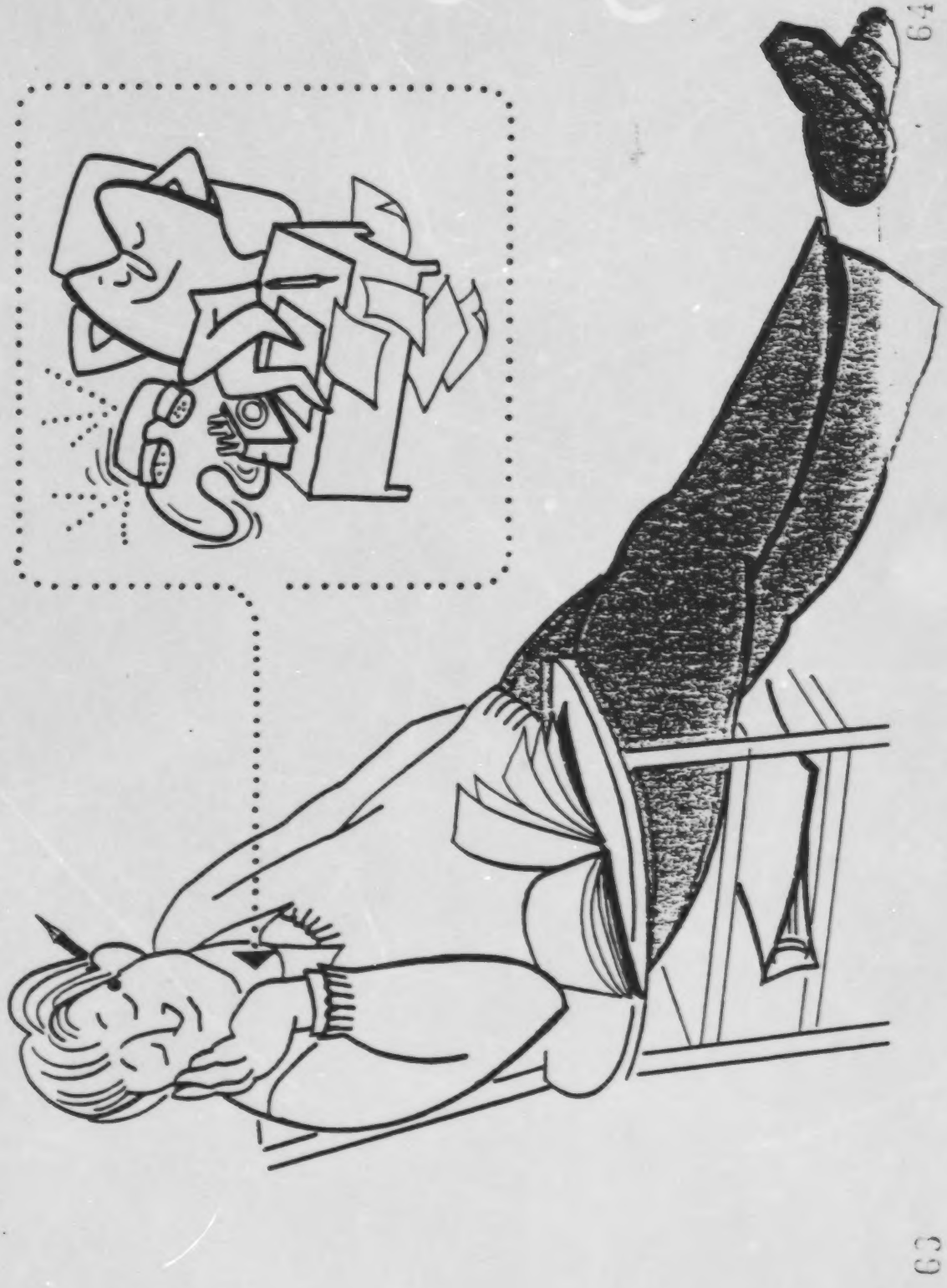
Distribute and have students complete Activity Sheet 5.

Emotions Affect Every Part of the Body

Transparency L Objective 4 - 1.1.4

Body Health Affects Thinking Ability

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Social Health Is Affected by Body Health

Feelings of Sorrow Hinder Appetite

BODY LANGUAGE

4301-1

1

Activity Sheet 1 Objective 4 - 1.1.4

You don't always have to *talk*
to say,
that you're feeling
a certain way.
Body language can reveal
how a person
really feels.

Part 1 ☆ Look at the people in this picture. See how their bodies look. Talk about how you think each person feels.

Part 2 ☆ You and some friends try to "talk" without using your mouths. Use other parts of your bodies instead. Some of the things you can "say" this way are:

- Hello.
- I am angry
- I don't know.
- Good-bye.
- I am tired.
- No! Yes!
- I feel happy.
- Please be quiet.
- What?
- I feel sad.
- Come here.
- Shake hands with me.

What else can you and your friends "say" without talking?

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DEALING WITH FEELINGS

5

It's fun to keep
a diary,
of how you felt today.
Were your feelings
calm?
Or fiery?
How long did each mood stay?

☆ Pick a different color crayon for each feeling you had today and color in this diary. Try to pick a crayon color that matches the way you felt. Sometimes you can feel more than one way at the same time, so you can make more than one check mark for each time.

☆ On a separate piece of paper, draw a picture of one of the feelings you had today.

Diary of Feelings

Time	*happy*	*sad*	*excited*	*angry*	*bored*	*hurt*	*scared*	*lonely*
waking up								
getting dressed								
eating breakfast								
leaving for school								
getting to school								
seeing your friends								
taking a test								
getting homework								
eating lunch								
thinking about going home								
going home								
seeing your parents								
eating dinner								
getting into bed								

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LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Feelings	4.V.1, 4.C.7	45 minutes

OBJECTIVE 4 - 1.1.4 Compare how feelings and organs are affected by each other.

INSTRUCTIONAL MATERIALS:

Kit: SVE, Slim Goodbody - Your Body, Health & Feelings.
(available in your media center)
Poster: "Human Body"
Chart: "Slim Goodbody Good Health Chart"
Activity Sheet 24 (Master included)
Filmstrip: "Healthy Habits" (words to song in filmstrip provided)

PROCEDURE:

Introduce the filmstrip by asking the students if they feel better after taking a bath; after having eaten a meal; after exercising.
Point to the Human Body Poster and remind the students of the many organs that work together in the body and how they need each other to do their job.
Point out that the way we take care of our body affects the way it functions.
That's why we feel better after eating, bathing, exercising, resting or standing up straight.

Show the filmstrip "Healthy Habits."
Have students sing along with the filmstrip when Slim Goodbody repeats "My Body Belongs to Me You See, My Body Belongs to Me."

Following the filmstrip, ask the students to hug themselves and say "I Love My Body."

EVALUATION:

Discuss vocabulary words from filmstrip.

germs	feelings
pride	posture
healthy	habits

Have the students answer the following questions:
What are some specific ways we can keep our bodies healthy?
Why should we practice healthy habits every day?
What does Slim mean when he describes our feelings as being like waves in the ocean?

OBJECTIVE 4 - 1.1.4

ENRICHMENT/REINFORCEMENT:

Distribute Activity Sheet 24. Have students keep track of their daily health habits for one week. For a longer period use the Slim Goodbody Good Health Chart. (four weeks) Using the charts ask the students to look for any changes, progress, and repeating items in the way they care for themselves over a period of time.

HEALTHY HABITS

4301-24

24

Objective 4 - 114

Your body deserves the best of care. From the ends of your toes to the tips of your hair. Your parents can help, your teachers can too. But most of it is up to you!

This Activity Card is to be used with the Slim Goodbody's Good Health Chart.

☆ Use this check-list to check your healthy habits. Use a different color crayon for each habit and make a check everyday.

At the end of the week, if you have practiced your healthy habits most of the week, you may make a check mark with your crayon on Slim Goodbody's Good Health Chart.

Healthy Habits

1. obeying safety rules
2. washing your hands before meals
3. brushing your teeth after meals
4. chewing your food well before swallowing
5. eating fruit
6. eating vegetables
7. getting a good night's sleep
8. exercising
9. drinking milk
10. flossing your teeth
11. using good posture
12. taking a bath or shower
13. shampooing your hair
14. cleaning your ears
15. brushing or combing your hair

1	2	3	4	5

45

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OBJECTIVE 4 - 1.1.4

Song
"Healthy Habits"

If you always want to have a clean power,
You have got to take a bath or a shower.

At least once every other day,
To wash the dirt and germs away.

Scrubba-Dubba, in the tubba'll never cause you pain.
Then pull the plugga with a tugga, dirt flows down the drain.

Healthy habits help to keep a person fit.
It's your body,
Why not take care of it.

Food gets left behind after we eat.
To clean it out is the reason we brush our teeth.

Use a brush and floss to clean it away.

Don't let it stay, it will cause tooth decay.

Brusha, brusha, but don't rusha, 'cause it's good for you.

And of coursa, you're the bossa, when you're flossing too!

Healthy habits help to keep a person fit.
It's your body.
Learn to take care of it!

Hold your body up, strong and proud.
When you're standing, or moving around,
Good posture helps you feel your best.
Now I want everybody with me to check this out by doing
a simple test.

First, slumpa dumpa in your seat; you'll feel no energy.

Now sit up straight, you look so great,
Your body feels so free.

Healthy habits help to keep a person fit.
It's your body.
Learn to take care of it.

OBJECTIVE 4 - 1.1.4

Your body belongs to you, it's true.
No one else but you.

Your body belongs to you, it's true.
Your body belongs to you.

Your body belongs to you, it's true.
Your body belongs to you.
I want you all to help me out with a song.
I'll sing a couple of lines and then you repeat it.
It's a short song, and so we'll soon complete it.
Are you ready? Good! Let's go now!

My body belongs to me, you see.
My body belongs to me. Your turn.

My body belongs to me, you see.
My body belongs to me.

One of the things that I can do,
Is give my hair a good shampoo.

Food is good, I'll eat enough.
But not too much, I won't get stuffed.

My body belongs to me, you see.
My body belongs to me.

My parents can help, my teachers too.
But no one can do what I can do.

It seems as clear as clear can be.
My wonderful body belongs to me!

I love my body!
I love my body!

Everybody give your body a nice
Wonderful hug. Mummm.

And now I want to talk about another very important
part of us: Feelings.

Sometimes I'm feeling happy.

And then something makes me sad.
I cry a bit, and I have a fit.

OBJECTIVE 4 - 1.1.4

And wind up feeling bad.

Everybody's floating on an Ocean of Emotion,
Afloat within our body boat
We ride the shifting tide.

Waves of feelings come and go.
They toss us high and leave us low,
As on and on and on we go,
Upon the flow inside.

Tears of sorrow bathe my cheeks,
When I'm sad and on my own.

But after, tears of laughter,
When I'm with friends at home.

Everybody's floating on an Ocean of Emotion.
Everybody's floating on an ever changing sea.

Waves of feelings come and go,
They toss us high, then leave us low.
As on and on and on we go
Upon the changing sea.

Think about all the different feelings that you have everyday.
Now, remember how you felt this morning when you got up?
Well that was one feeling.
And remember how you felt on your way to school. That's another feeling.
And how was it seeing your friend for the first time in the day?
How did you feel then?

You see, our feelings change all the time.
You don't have to be afraid of any of your feelings, though,
Anger or sadness, being afraid and all the rest.
Well all of us have feelings like that.
And we all have so many different moods inside of us that
It's impossible to feel happy all the time.

OBJECTIVE 4 - 1.1.4

Everybody's floating on an Ocean of Emotion,
Everybody's floating on an every changing sea.

Everybody's floating on an every changing sea.

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LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Feeling	4.V.1, 4.C.7	45 minutes

OBJECTIVE 4 - 1.1.4 Compare how feeling and organs are effected by each other.

INSTRUCTIONAL MATERIALS:

Kit: SVE, Slim Goodbody - Your Body, Health & Feelings. (available in your media center)
Filmstrip: "Resting and Exercising" (words to song in filmstrip provided)
Activity Sheet 25 (Master included, Make a copy for each student)

PROCEDURES:

Discuss with students how they feel when they are inactive, e.g., when they watch T.V. all day or when they get too much sleep. Explain that in order to keep our organs healthy and to feel energetic, we need to exercise our bodies.

Show the filmstrip "Resting and Exercising."

EVALUATION:

Discuss and review vocabulary words:

exercise	energetic
relax	muscle
energy	surroundings

Have students answer the following questions.
Why is it important to exercise every day?
What are some specific ways of exercising and relaxing that Slim suggests?
How do exercise and rest complement each other?
How do exercise and rest help our organs function?

ENRICHMENT/REINFORCEMENT:

Have students slouch in their desks for five minutes while reading a book. Then have them sit up straight for five minutes and read. Have students compare the two sitting positions. Use the following questions to stimulate discussion.
What organs do you think were affected and how?
What differences did it make in the way you felt?

OBJECTIVE 4 - 1.1.4

Distribute Activity Sheet 25. Sign the "I Love My Body Certificate" for each student. Remind the students that their body belongs to them and that it's up to them to take care of it.

Have students learn the song, "Resting and Exercising," and show actions indicated by words.

Song
"Resting and Exercising"

I have a couple of friends
I want you to meet.

They live just across
The wide street,
In that house over there.

The girl was named Lazy Sadie.

The boy was named Stay-Inside-Pete
For a good reason.

When they came home in the afternoon,
They just sat and watched TV in the living room.

When I asked them to come out and play with me,
They said, "No, we're going to save energy."

I said, "It's important to use your muscles."
And I taught them a dance called Muscle Hustle.

I want you all to stand up and do it with me.
It's easy.
Ready, let's go.

Stretch your body out.
Really stretch it, ummm.

And let out a short shout, now.
Uhh. Good.

Bend your top half down, shake it out.
And softly tap the ground.

Stand up tall.

Run up and down in place.

OBJECTIVE 4 - 1.1.4

Exercise the smiling muscles in your face.

Jump up high and reach for the sky.
Now flap your arms like wings that fly.

Twist to the left, twist to the right.
When you do the Muscle Hustle.
You feel alright.

Let's do it again, slightly quicker.
A little more speed, its all we need.

Stretch your body out,
And give a short shout. Uhh

Bend your top half down,
And softly tap the ground.

Run up and down in place,
With a big bright smile on your face.

Jump up high and reach for the sky.
Flap your arms like wings that fly.
Twist to the left, twist to the right.
The Muscle Hustle's out of sight.

Sit back and rest a bit.
Your body will feel better for it.

Like Sadie and Pete, you'll realize
How much we all need exercise.

Sadie and Pete, I'm glad to say,
Do the Muscle Hustle everyday.

They're really looking good,
Doing what they should.
Exercising muscles,
Doing the Muscle Hustle.

Of course, it's good to work and play.
But at the ending of the day,
We put our toys and thoughts away.

OBJECTIVE 4 - 1.1.4

Night time and we start yawning.
Back to the beds we left in the morning.
Warm.

Though on our beds we are lying,
In our dreams,
We can go flying high.
Flying high,
Flying high, flying high.

Nobody sees and nobody knows,
Where someone else goes in their dreams at night.
It's a world of your own.
A fantasy home
Both comic and tragic.
It's a world filled with magic.

Now I want you all to close your eyes,
And just listen to the music.

Relax your body and drift off.
Picture beautiful dream scenes in your mind
Places you would like to go. Sunshine, blue skies and beaches.
People you love and would like to see.
In your dreams you're completely free.
Through the world you can go exploring,
Letting your imagination so soaring.
You need about eight hours to rest,
To feel your very best.
It's such a delight to lay down at night.
Letting my body rest.
Feeling I'm truly blessed.

Now, slowly open up your eyes.
Stretch out.

Take a breath.
Let it out.

Each day when you wake up from your dream.
The morning world seems fresh and clean.

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THE I LOVE MY BODY CERTIFICATE

The **I Love My Body Certificate** has been awarded to

on You have shown pride, love and respect for your wonderful body and you are now an important member of Slim Goodbody's Good Health Club.

Signed

Slim Goodbody

Slim Goodbody

GRADE LEVEL: Fourth

THEME: Physical, Mental, and Social Health

PRIMARY IDEA: 2.0 Development in individuals may be altered by factors in the environment.

SECONDARY IDEAS	OBJECTIVES
4 - 2.1 The digestive process is a total body function.	To demonstrate knowledge of the total digestive process, students will do the following: 4 - 2.1.1 identify organs of the digestive system; 4 - 2.1.2 explain the function of the digestive organs; 4 - 2.1.3 explain the interrelationships of the digestive organs in breaking down food for body needs; 4 - 2.1.4 describe how proper nutrition aids in the digestive process and; 4 - 2.1.5 relate the importance of teeth and their care to digestion.

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Digestive Organs	4.V.1, 4.C.8	45 minutes

OBJECTIVE 4 - 2.1.1 Identify organs of the digestive system.

INSTRUCTIONAL MATERIALS:

Kit: SVE, Slim Goodbody - Your Body, Health & Feelings, (Kit is available in media center.)
Filmstrip: "Food: The Fuel of Life." (Words to song in filmstrip provided.)
Activity Sheets: #3 and #15 (Masters included, make a copy for each student)
Mirror, peanuts, sample of fruit (Have student bring from home)

PROCEDURES:

This filmstrip explains why we need food, and in doing so explains the concept of digestion. Slim will mention some major organs involved in the digestive process. We will view the filmstrip and discover how food is "the fuel of life."
Distribute words to song in filmstrip and show filmstrip. Have students sing along with Slim while looking at words.

EVALUATION:

Discuss and review vocabulary words:

digest	liquid	stomach
dissolve	saliva	small intestine
fuel	esophagus	large intestine

Have students answer the following questions.
Why do we need food?
Why does Slim suggest that food is "the fuel of life?"
What is the role of the tongue and mouth in digestion?
How does the esophagus, stomach and intestines aid in the process of digestion?

ENRICHMENT/REINFORCEMENT:

Distribute activity sheets #3 and #15 and have students follow the directions for completing these sheets. After students have finished, discuss the activity sheets.

OBJECTIVE 4 - 2.1.1 Song: "Food: The Fuel of Life"

Food is the fuel that'll keep us alive.
Food is the fuel that'll give us a drive.
Food is the fuel that'll keep us on the go.
You've got to eat right, if you want to grow!

Not only do we use food to keep our bodies going,
We use food to keep our bodies growing.

Raise your hand if you are taller this year than you were last year.
Put your hands down and sing with me.

Food is the fuel that'll keep us alive.
Food is the fuel that'll give us a drive.
Food is the fuel that'll keep us on the go.
You've got to eat right if you want to grow!

Some of what you eat one day becomes part of your body the next day.
That doesn't mean that if you eat a banana,
You become a banana.

It means that your body uses the food you eat to grow bigger.
Remember, there is more of you now than there was last year.

Food is the fuel that'll keep us alive.
Food is the fuel that'll give us a drive.
Food is the fuel that'll keep us on the go.
You've got to eat right, if you want to grow!

Now, I want you all to use your imagination.
Close your eyes and imagine your dinner table with your favorite piece of food on it.
Look at that food. Ummm.
Sing with me.

Food is the fuel that'll keep us alive
Food is the fuel that'll give us a drive.
Food is the fuel that'll keep us on the go.
You've got to eat right, if you want to grow!
You've got to eat right, if you want to grow!

OBJECTIVE 4 - 2.1.1 Song: "Food: The Fuel of Life"

Let's go!

Food, food, food, food,
Food, food, food.
Food, food, food, food,
Food, food, food.

Food, food, food.
Food, food, food.
Food, food.
Food, food, food.

Food is the fuel that'll keep us alive.
Food is the fuel that'll give us a drive.
Food is the fuel that'll keep us on the go.
You've got to eat right, if you want to grow!

Food is the fuel that we use for growing.
It gives us energy to keep on going.

With fingers, a spoon, a fork or a knife,
We bring into our mouths
The fuel of life.

Food is the fuel that'll keep us alive.
Food is the fuel that'll give us a drive.
Food is the fuel that'll keep us on the go.
You've got to eat right, if you want to grow!

Everything around us uses some kind of fuel to run.
Light bulbs use electricity.

Cars use gasoline.

And our bodies get their energy from food.

Food is the fuel that'll keep us alive.
Food is the fuel that'll give us a drive.
Food is the fuel that'll keep us on the go.
You've got to eat right, if you want to grow!

We need a lot of different kinds of food to stay healthy.
Milk, bread, fruit, vegetables, meat and fish.

A good way of making sure you're getting a good variety,
Is to have a lot of different colored foods on your plate at mealtime.

OBJECTIVE 4 - 2.1.1 Song: "Food: The Fuel of Life"

Now I'm going to tell you about what happens to food after you eat it.
But first, I want you to learn what two words mean.
The first word is dissolve. Everybody say dissolve.
That's what it's called when a solid becomes a liquid.
This usually happens when you put something into a liquid.
For instance, if you pour salt into water, it will dissolve and become salt water.

The second word I want you to learn is digestion. Say digestion.
When food gets broken down into a form your body can use, it's called digestion.

After you put some food into your mouth, digestion begins.
You'll learn about it more when you hear my song.
And you'll learn a little better if you sing along.
Now listen first to the chorus which I'll now begin.
An when I go through it once, join right in.

Down, down, down, down, d-down.
Down, down, down, down, d-down.
Down, down, down, down, d-down.
Down.
Sing it with me!

Down, down, down, down, d-down.
Down, down, down, down, d-down.
Down, down, down, down, d-down.
Down.

Take an imaginary piece of food from the air.
Put it into your mouth and taste it.

Then push it between your teeth with your tongue.
Your tongue is a muscle.

Your teeth tear and grind up food.

Get the food wet with saliva.
Swallow it.
Put your hands in the air and sing with me.

Down, down, down, down, d-down.
Down, down, down, down, d-down.
Down, down, down, down, d-down.
Down.

OBJECTIVE 4 - 2.1.1 Song: "Food: The Fuel of Life"

Now the food will move down a long tube we call the esophagus.
Everybody say esophagus.
The esophagus is also called the food tube.
So, everybody say food tube.

The esophagus goes from your throat down to your stomach.
Trace it with your finger, and sing with me.

Down, down, down, down, d-down.
Down, down, down, down, d-down.
Down, down, down, down, d-down.
Down.

Next the food will drop into your stomach ker-plop.
Muscles in the stomach begin to mix the food up with juices.

By the time the food leaves your stomach, it has been dissolved into a thick liquid.
Now everybody do some churning and sing with me.

Down, down, down, down, d-down.
Down, down, down, down, d-down.
Down, down, down, down, d-down.
Down.

Now the liquid food goes into the small intestine.
The small intestine is a tube that is over six meters long.
It can fit into your body because it's all curled up.

While the food is in the small intestine.
The liver pours juices down which help dissolve it even more.
In your small intestine, the food goes.

Round and around and around
Round and around and around
Round and around and around and around
And around and around it goes.

Now some of the dissolved food passes into the blood stream,
Through the walls of the small intestine.
It gets carried away to all parts of your body.

The left over parts of food which your body can't use goes into the large intestine.
And later on, it's passed out from your body.

OBJECTIVE 4 - 2.1.1 Song: "Food: The Fuel of Life"

Now one more time.
Take an imaginary piece of food.
Look at it.
Smell it, say, "I love you food!"

Put it into your mouth,
Chew it up,
Swallow it.

Put your hands here and sing along with me.

Down, down, down, down, d-down.
Down, down, down, down, d-down.
Down, down, down, down, d-down.
Down.

Here's your homework assignment.
Tonight, when you eat dinner with your parents,
Take a piece of food, chew it up, swallow it.
Stand up at the dinner table,
Smile and go...

Down, down, down, down, d-down,
Down, down, down.
And when your parents say, "What are you doing?"
Say, "I learned it in school today. It's my homework."
And do it again.

Down, down, down, down, d-down.
Down, down, down, down, d-down.
Down, down, down, down, d-down.
Down.

And when you're finished,
Slowly sit down.

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YOUR MOUTH IS A HOUSE

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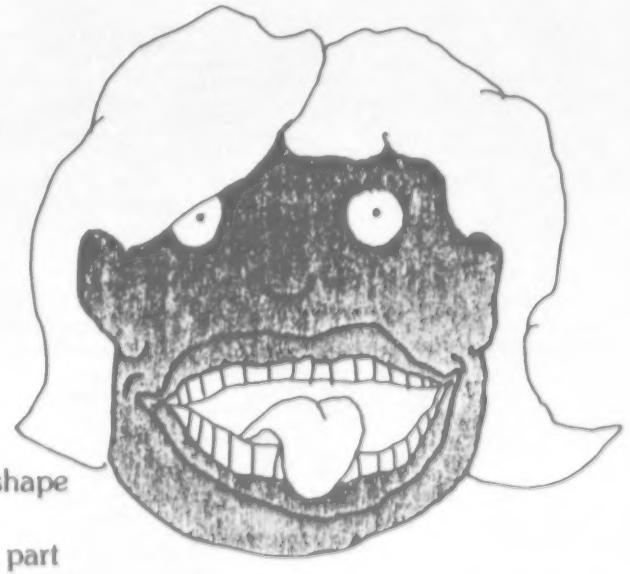
3

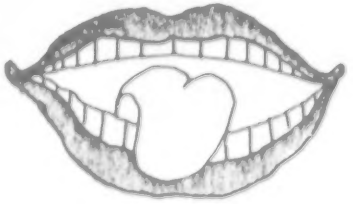
Objective 4 - 2.1.1

Your mouth is a house,
your teeth and tongue are inside.
At the front door are your lips,
which close or open wide.



Part 1 ☆ Look at your mouth in a mirror. See the shape of your lips, teeth and tongue. Then draw a picture of your mouth. Talk about what each part of your mouth does for you.

Part 2 ☆ What feelings are these pictures of mouths showing?



Part 3 ☆ Tell your friends the story of how you lost one of your teeth.

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THE TERRIFIC TONGUE

15

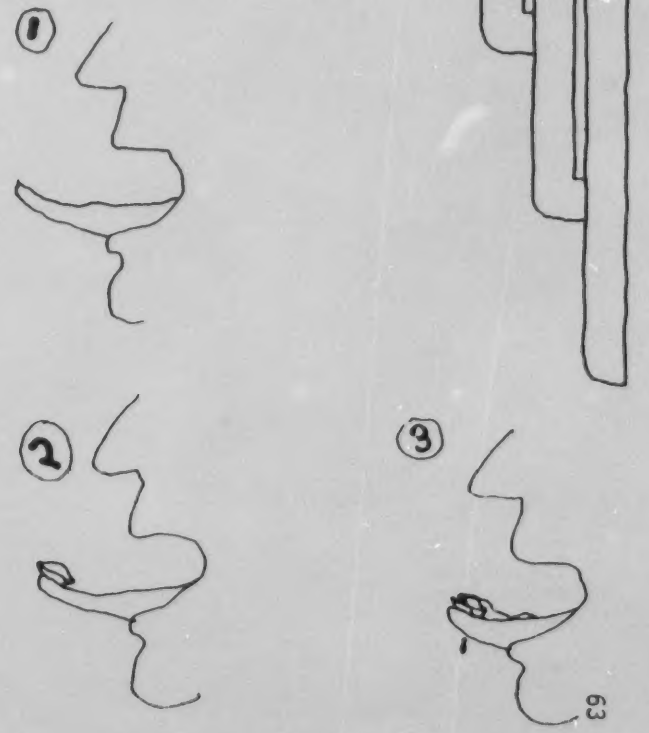
The tongue in your mouth
Has a lot of things to do.
Like moving around the food
For your teeth to chew.

Part 1 ☆ You can't taste the food on your tongue unless it is wet with saliva. If you don't believe it, try this experiment. Dry the tip of your tongue with a tissue. Then place a peanut on it. You won't be able to taste it. Now get the peanut wet with saliva and you'll be able to taste its flavor.

Part 2 ☆ Look at your tongue in a mirror. You'll see that it is covered with tiny bumps. Under those bumps are over 9,000 taste buds. They enable us to taste.

Part 3 ☆ Try to eat a piece of fruit without using your tongue. Tell somebody what happened.

Part 4 ☆ Try to talk without moving your tongue. Ask a friend if he or she can understand what you are saying.



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LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Digestive Organs	4.C.2	45 Minutes

OBJECTIVE 4 - 2.1.1 Identify organs of the digestive system.

INSTRUCTIONAL MATERIALS:

Kit: SVE, Slim Goodbody - Your Body, Health & Feelings
Poster: "Human Body"
Activity Sheet: #2 (Master included, make a copy for each student)
Cracker or small substance which students may eat
Small glass of water
1 teaspoon of salt
Art Kraft paper

PROCEDURE:

Place "Human Body" poster on a wall or chalkboard at eye level.

In this lesson, the major organs of the digestive system will be discussed and the path food travels through the system. Give each student a cracker and have them eat it.

Dissolve a teaspoon of salt in a glass of water. Explain that the digestive system is going to dissolve the cracker they ate into a liquid form just as the salt was dissolved into a liquid in the water.

Use the suggested questions to discuss each digestive step while pointing to the specific organ on the "Human Body" poster.

When you chewed the cracker what two organs were involved?
When you swallowed the cracker what tube took it from the mouth to the stomach?
Where did your food come to its stop? (This is where the food is dissolved into a liquid.)
What organ pours juices into the small intestine that helps to dissolve the food even more?
Where does the food that is not released into the bloodstream from the small intestine go? (When your cracker reaches this point, its path through the digestive system is complete.)

OBJECTIVE 4 - 2.1.1

EVALUATION:

Distribute Activity Sheet #2 and instruct students to follow directions for completing the maze.

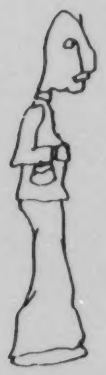
ENRICHMENT/REINFORCEMENT:

Have students share with their parents the way food travels through the digestive system.

Have students make a food pathway mobile to hang on a string and take home. Draw and cut out on large sheets of Art Kraft paper the food pathway starting with the esophagus, through the stomach, the small intestine, and ending with the large intestine. Punch a hole in the esophagus tip and thread with string.

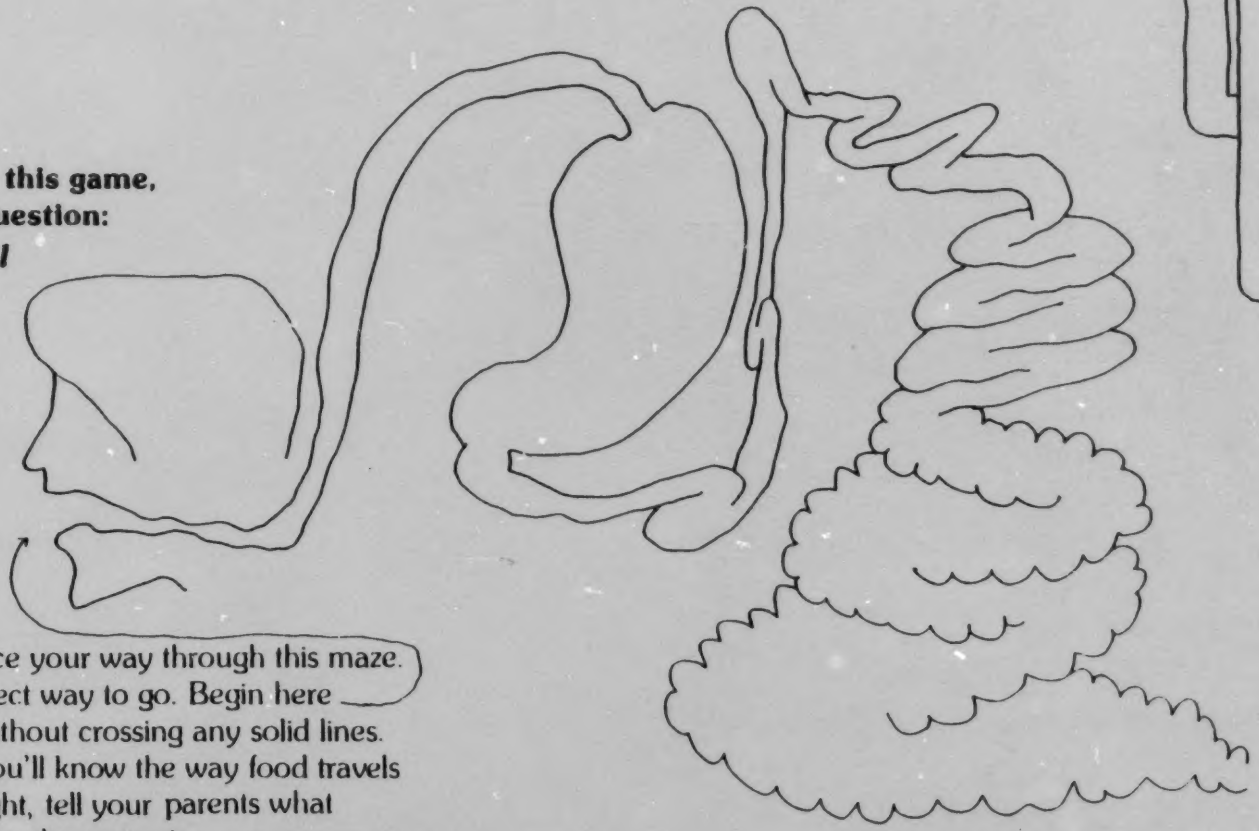
THE QUESTION OF DIGESTION

2



When you've finished this game, you can answer the question:
"How does food travel during digestion?"

The Amazing Maze



Using a crayon, trace your way through this maze. There is only one correct way to go. Begin here and reach the finish without crossing any solid lines.

When you finish, you'll know the way food travels during digestion. Tonight, tell your parents what happens to food after you've eaten it.

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LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Digestive Organs/ Functions	4.C.2	Three 45 minute periods

OBJECTIVE 2.1.2 Explain the function of the digestive organs.

INSTRUCTIONAL MATERIALS:

J.D. Ratcliff, Reprints from Reader's Digest (available in your media center)
"I am Joe's Intestines", August 1971
"I am Joe's Liver", September 1979
"I am Joe's Pancreas", August 1974
"I am Joe's Stomach", May 1978
Drawing: Human Body (Master included, make a copy for each student.)
Filmstrip Series: Eyegate, How Your Body Parts Function (check with your media center)
Filmstrip: Part I: "The Stomach", "The Intestines and Pancreas"
Part III: "The Liver"
Evaluation Sheets: "The Stomach", The Liver", "The Intestines and Pancreas" (masters and review key provided)

PROCEDURE:

Divide class into four groups. Each group will investigate one of the following four organs: liver, stomach, pancreas, intestines. Ask them to look for facts in their research which are incredible things the organ does. The Reader's Digest articles are excellent sources of information for finding these facts, however the student will need assistance with the vocabulary in the reading. They may also find additional research material in the media center.

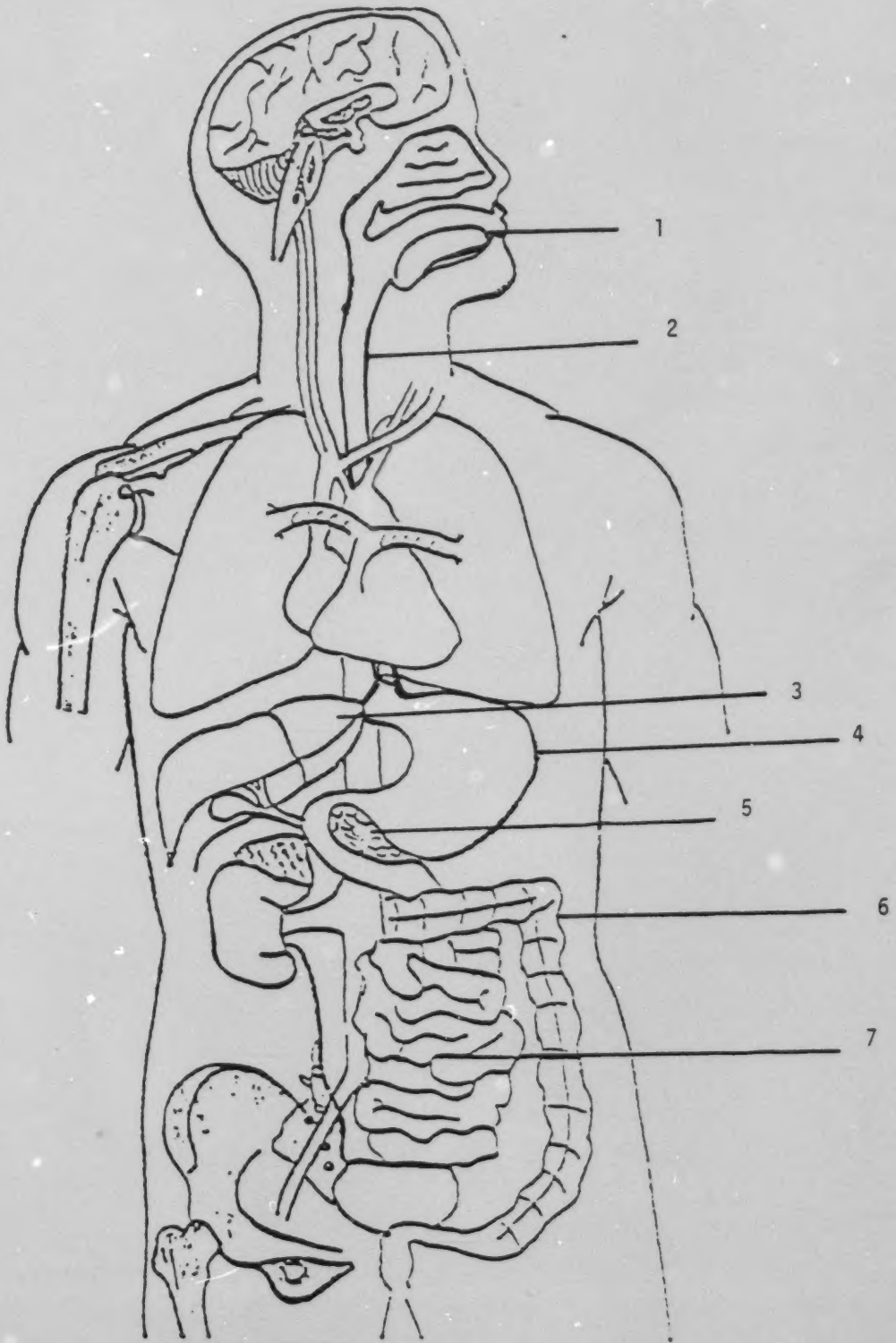
Have them report to the class by producing a "That's Incredible Show." Choose three students to be moderators of the show. Have them introduce each group before they report and respond with the statement "that's incredible" whenever appropriate.

EVALUATION:

Distribute drawing of the "Human Body" and have students label the organs of the digestive system.

ENRICHMENT/REINFORCEMENT:

Have students review in a learning center filmstrips from Eyegate, How Your Body Parts Function, on the stomach, intestines and pancreas, and the liver. Following the viewing of each filmstrip, have students answer evaluation sheet provided. Provide a key for checking their answers. Evaluation sheets may also be completed using other appropriate resource materials found in your media center.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OBJECTIVE 4 - 2.1.2

"The Stomach"
Questions For Review

Choose from the word bank below to complete the following sentences.

enzymes	1 quart
abdomen	walls
intestines	blood tubes
juice	esophagus
paste	saliva

1. The stomach is located in the _____, underneath the diaphragm muscle and covered by the ribcage in front.

2. A tube called the _____connects the stomach to the throat and mouth.

3. The glands in the mouth produce a liquid called _____which keeps the mouth, throat, and esophagus wet.

4. The stomach can hold about _____of food and still be pretty comfortable.

5. Between the stomach muscles churning and the stomach juice mixing, the food becomes a thick _____.

6. The stomach wall muscles squeeze the food paste out into the _____ below.

7. There are small openings in the stomach's inside _____ that push out the stomach juice.

8. The _____ in the stomach forms a lining that protects it from hot or cold foods, or foods that could scratch the stomach walls.

9. The stomach juice contains chemicals called _____which break the food down into tiny pieces which mix up into the paste.

10. Liquids pass through the stomach walls into the _____nearby.

OBJECTIVE 4 - 2.1.2

Review key for "The Stomach Questions"

1. abdomen
2. esophagus
3. saliva
4. 1 quart
5. paste
6. intestines
7. walls
8. juice
9. enzymes
10. blood tubes

OBJECTIVE 4 - 2.1.2

"The Intestines"
Questions for Review

Choose from the word bank below to complete the following sentences.
One of the words in the word bank will be used twice.

small intestine	esophagus	liver, gall bladder
cavity	bloodtubes	small intestine, large intestine
enzymes	digestive	large intestine

"The Intestines"
Questions for Review

1. What are the names of the two main parts of the intestines?
2. The _____ intestine is about 15-20 feet long, but it is only about 1 inch wide.
3. The _____ intestine is much shorter than the small intestine, but it is twice as wide.
4. The intestines are located in the _____ under the disphragm muscle.
5. The large and small intestine, the liver, the pancreas gland, and the mouth all work together as part of our _____ system.
6. The mouth and stomach are connected by a tube called the _____.
7. The small intestine signals the pancreas to send chemicals called _____ to help it break up the food into tiny pieces.
8. When the small intestine receives "fatty" foods it sends messages to the _____ and its little storage bag next door called the _____.
9. The small intestine pushes the food waste into the _____ intestine.
10. The large intestine sends the water that it takes away from the food to the _____.

OBJECTIVE 4 - 2.1.2

Review Key for "The Intestines" Questions

1. small intestine, large intestine
2. small intestine
3. large intestine
4. cavity
5. digestive
6. esophagus
7. enzymes
8. liver, gall bladder
9. large intestine
10. bloodtubes

OBJECTIVE 4 - 2.1.2

"The Liver"
Questions for Review

Choose from the word bank below to complete the following sentences.

fats	stomach and intestines	vitamin K
sugars	digestive	
vitamin A, vitamin D	lymph	
iron, bones	gallbladder, bile	
intestine	amino acids	

1. Your liver is located in your abdomen under your _____ muscle.
2. Your liver is part of your _____ system.
3. Your liver has a storage bag called the _____ which stores extra _____.
4. Bile that your liver makes goes into your _____.
5. Bile is necessary for you to get energy and vitamins from _____.
6. Large fatty droplets get to the liver by going through _____ tubes into veins and then to the liver.
7. Your liver stores _____ from the starch foods you eat until your body cells need it.
8. Tiny _____ _____ that come from protein in the foods you eat are used to make more proteins in the cells of body organs.
9. Your liver converts some fats to energy; other fats are sent off through the blood for _____ or use by other cells.
10. To see in dim light you need vitamin ___ and you need vitamin ___ for strong bones.
11. Your liver stores vitamin _____ which helps you to stop bleeding when you get a scratch or cut.
12. Your liver takes valuable _____ from worn out red blood cells. Your liver sends it to your _____ which put it into new red blood cells that they make.

OBJECTIVE 4 - 2.1.2

Review Key for "The Liver" Questions

1. stomach and intestines
2. digestive
3. gallbladder,bile
4. intestine
5. fats
6. lymph
7. sugars
8. amino acids
9. storage
10. vitamin A, vitamin D
11. vitamin K
12. iron,bones

LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Digestive Organs/ Interrelationships	4.C.8	45 minutes

OBJECTIVE 4 - 2.1.3 Explain the interrelationships of the digestive organs in breaking down food for body needs.

INSTRUCTIONAL MATERIALS:

Filmstrip Series: BFA Educational Media, Food and Us.
Filmstrip: "How We Use Food"
Filmstrip: Miller Brody Productions, "What Happens To A Hamburger." (Optional)

PROCEDURE:

Food is the fuel that keeps our bodies functioning properly. This filmstrip will show how food is broken down in the digestive system to be used by the body. Show filmstrip to students.

EVALUATION:

Have students answer the following questions.

1. In what ways does the human body resemble a machine?
   What does the body use for fuel?
2. What happens to food after it enters the mouth?
   What extremely important function is performed by the small intestine?
3. How does the circulatory system help the body get the fuel it needs?
4. What do the kidneys do to help in the digestion of food?

ENRICHMENT/REINFORCEMENT:

Have students brainstorm all the ways they can think of that the body uses food as fuel to function. (examples: run, play ball, smile, think, write)

Show filmstrip "What Happens to A Hamburger" as additional reinforcement on how the body uses food as fuel.

CONCEPT/SKILL Digestive Organs/ Interrelationships	TEST IMS 4.C.8, 4.C.6	ESTIMATED TIME Three 45-minute periods

OBJECTIVE 4 - 2.1.3 Explain the interrelationships of the digestive organs in breaking down food for body needs.

INSTRUCTIONAL MATERIALS:

U. S. Department of Agriculture, What's To Eat? And Other Questions Kids Ask About Food. (Washington, D.C.: Governmental Printing Office, 1970), pp.75-89)
Play: "Food: What It Does For You and How It Does It." (Master included, book is available in your media center.)
Evaluation Sheet: "You and Nutrients" (Master included, make a copy for each student.)

PROCEDURE:

Culminate the concept of digestion and how the body uses food for fuel by having the students present a play. Scripts are provided for seventeen parts, plus a moderator for the play "Food: What It Does for You and How It Does It."

Assign parts to students and have those not involved in a speaking part participate by providing visual background or by staging the play.

Have students make posters for each script that can be held up while the part is given. The poster should illustrate in a simple way what is being said. Paste the script to the back of the poster so that it can be read or referred to by the student during the play.

EVALUATION:

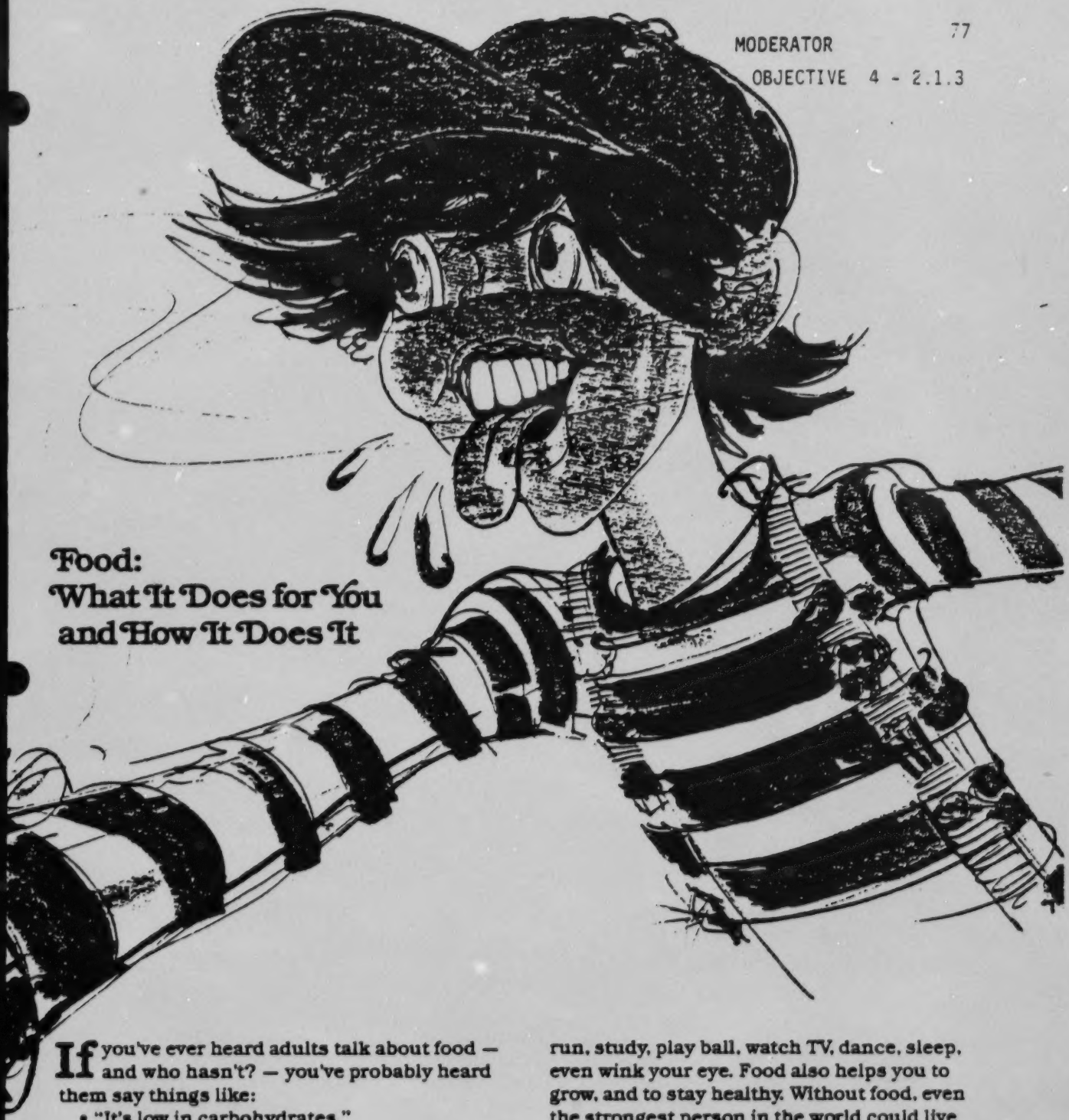
Distribute evaluation sheet "You and Nutrients" and have students follow directions for filling in the sentences.

ENRICHMENT/REINFORCEMENT:

Perform the play for your school during assembly or at lunchtime. Invite parents to view the play.

MODERATOR

OBJECTIVE 4 - 2.1.3



Food: What It Does for You and How It Does It

If you've ever heard adults talk about food — and who hasn't? — you've probably heard them say things like:

- "It's low in carbohydrates."
- "I'm counting calories."
- "You should eat a balanced diet."

But what do all those things really mean?

Before we can answer that question, we first have to talk about what food does for your body, and how it does it.

Food gives you the energy you need to walk, run, study, play ball, watch TV, dance, sleep, even wink your eye. Food also helps you to grow, and to stay healthy. Without food, even the strongest person in the world could live only 7 or 8 weeks.

But how does food do its job? To understand this, you need to understand things like digestion, cells, and nutrients. All of these things work together to help produce the energy you need to keep your body running. So, let's first look at how digestion works. ▸▸

PART ONE

OBJECTIVE 4 - 2.1.3

You and Digestion

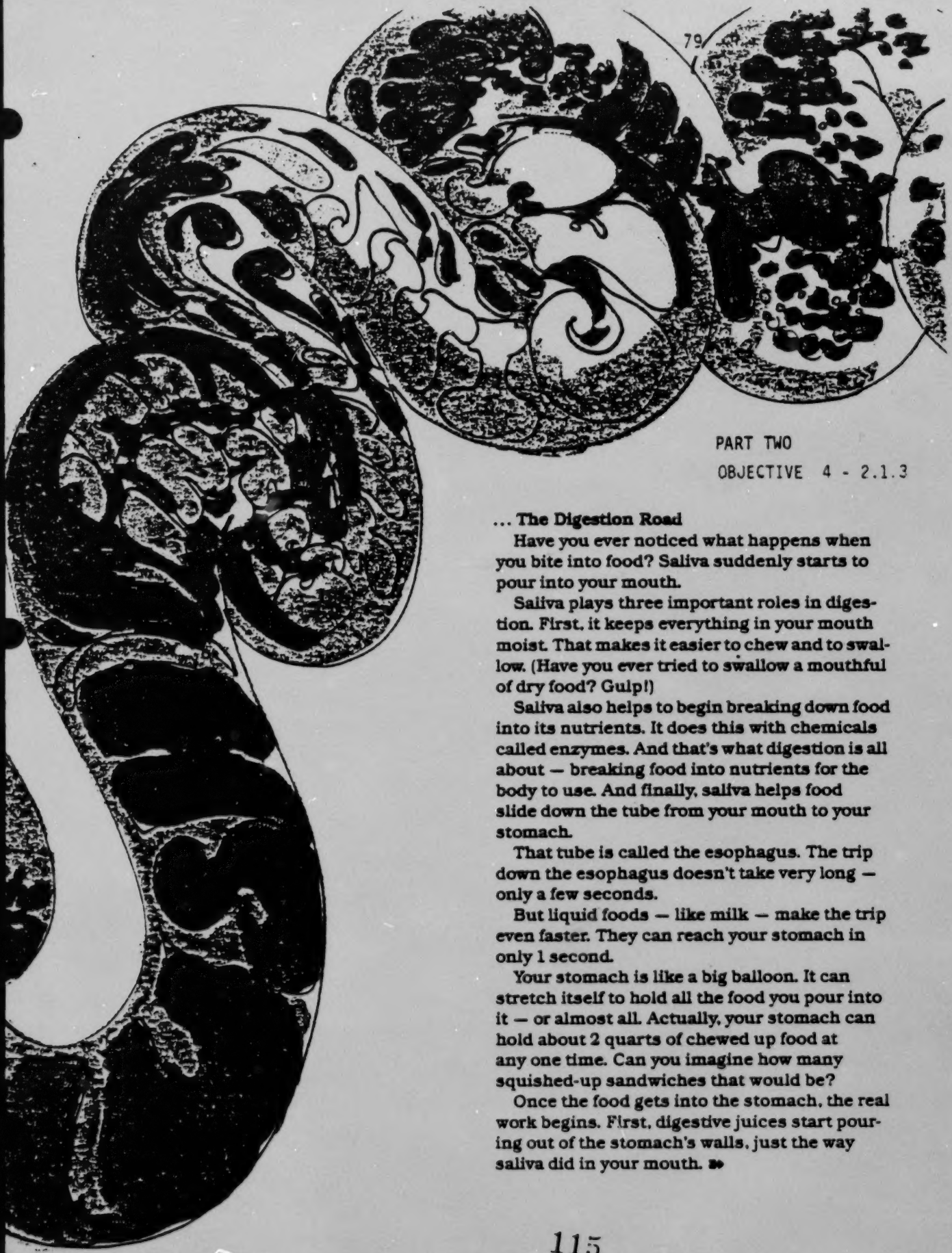
Bet you thought digestion started with your mouth, didn't you? But it can actually start even before you take that first bite.

Just think about the smell of freshly baked bread. What happens? Chances are your mouth will start to water. That's the first sign that your body is getting ready to digest food.

Digesting that food may take your body as little as 3 hours, or as long as 11 hours. That depends on what and how much you eat.

But no matter whether it's a banana or a glass of milk, all food travels along the same path. And that path is 25 feet long — even if you're only 5 feet tall.

How can that be? Let's find out. We'll follow food from the moment it enters your mouth to the time it leaves your body. And we'll see exactly what happens at each step along the way. Ready? Fasten your seat belts. We're off on a trip down...



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PART TWO

OBJECTIVE 4 - 2.1.3

... The Digestion Road

Have you ever noticed what happens when you bite into food? Saliva suddenly starts to pour into your mouth.

Saliva plays three important roles in digestion. First, it keeps everything in your mouth moist. That makes it easier to chew and to swallow. (Have you ever tried to swallow a mouthful of dry food? Gulp!)

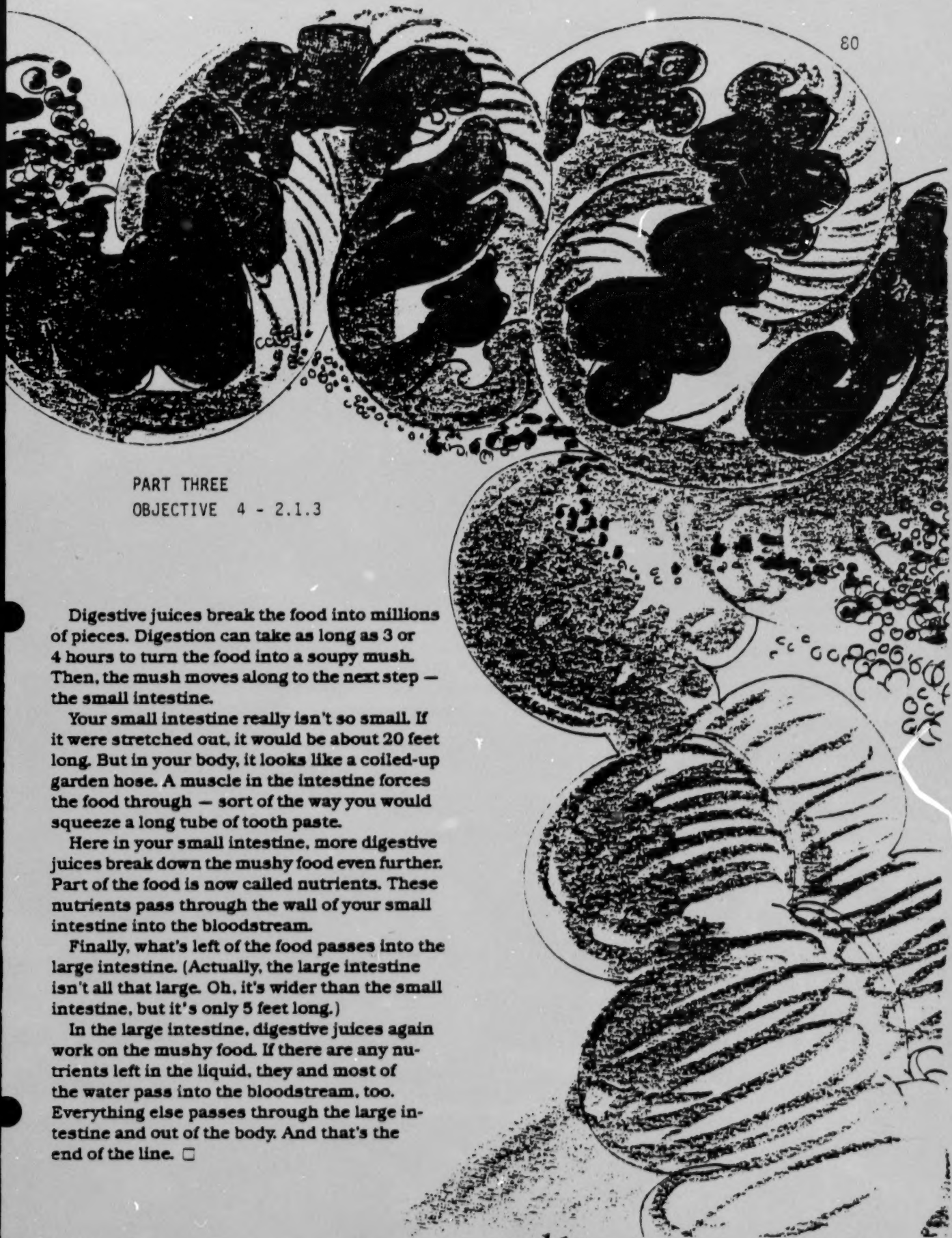
Saliva also helps to begin breaking down food into its nutrients. It does this with chemicals called enzymes. And that's what digestion is all about — breaking food into nutrients for the body to use. And finally, saliva helps food slide down the tube from your mouth to your stomach.

That tube is called the esophagus. The trip down the esophagus doesn't take very long — only a few seconds.

But liquid foods — like milk — make the trip even faster. They can reach your stomach in only 1 second.

Your stomach is like a big balloon. It can stretch itself to hold all the food you pour into it — or almost all. Actually, your stomach can hold about 2 quarts of chewed up food at any one time. Can you imagine how many squished-up sandwiches that would be?

Once the food gets into the stomach, the real work begins. First, digestive juices start pouring out of the stomach's walls, just the way saliva did in your mouth. ➤➤



PART THREE
OBJECTIVE 4 - 2.1.3

Digestive juices break the food into millions of pieces. Digestion can take as long as 3 or 4 hours to turn the food into a soupy mush. Then, the mush moves along to the next step — the small intestine.

Your small intestine really isn't so small. If it were stretched out, it would be about 20 feet long. But in your body, it looks like a coiled-up garden hose. A muscle in the intestine forces the food through — sort of the way you would squeeze a long tube of tooth paste.

Here in your small intestine, more digestive juices break down the mushy food even further. Part of the food is now called nutrients. These nutrients pass through the wall of your small intestine into the bloodstream.

Finally, what's left of the food passes into the large intestine. (Actually, the large intestine isn't all that large. Oh, it's wider than the small intestine, but it's only 5 feet long.)

In the large intestine, digestive juices again work on the mushy food. If there are any nutrients left in the liquid, they and most of the water pass into the bloodstream, too. Everything else passes through the large intestine and out of the body. And that's the end of the line. □

PART FOUR

OBJECTIVE 4 - 2.1.3

You and Cells

The nutrients are now in the blood. They've passed through the walls of the intestines and have entered the blood vessels. These blood vessels go to all parts of the body. The nutrients are carried farther into a vast network of tiny vessels, called capillaries. The capillaries stretch out in all directions to reach the more than 100 trillion cells in your body. Now the real work begins, feeding your cells from your eyeballs to your toes.

All living things — and that includes plants, animals, and you — are made up of cells. Some things are made up of only one cell. You, however, are made up of over 100 trillion cells.

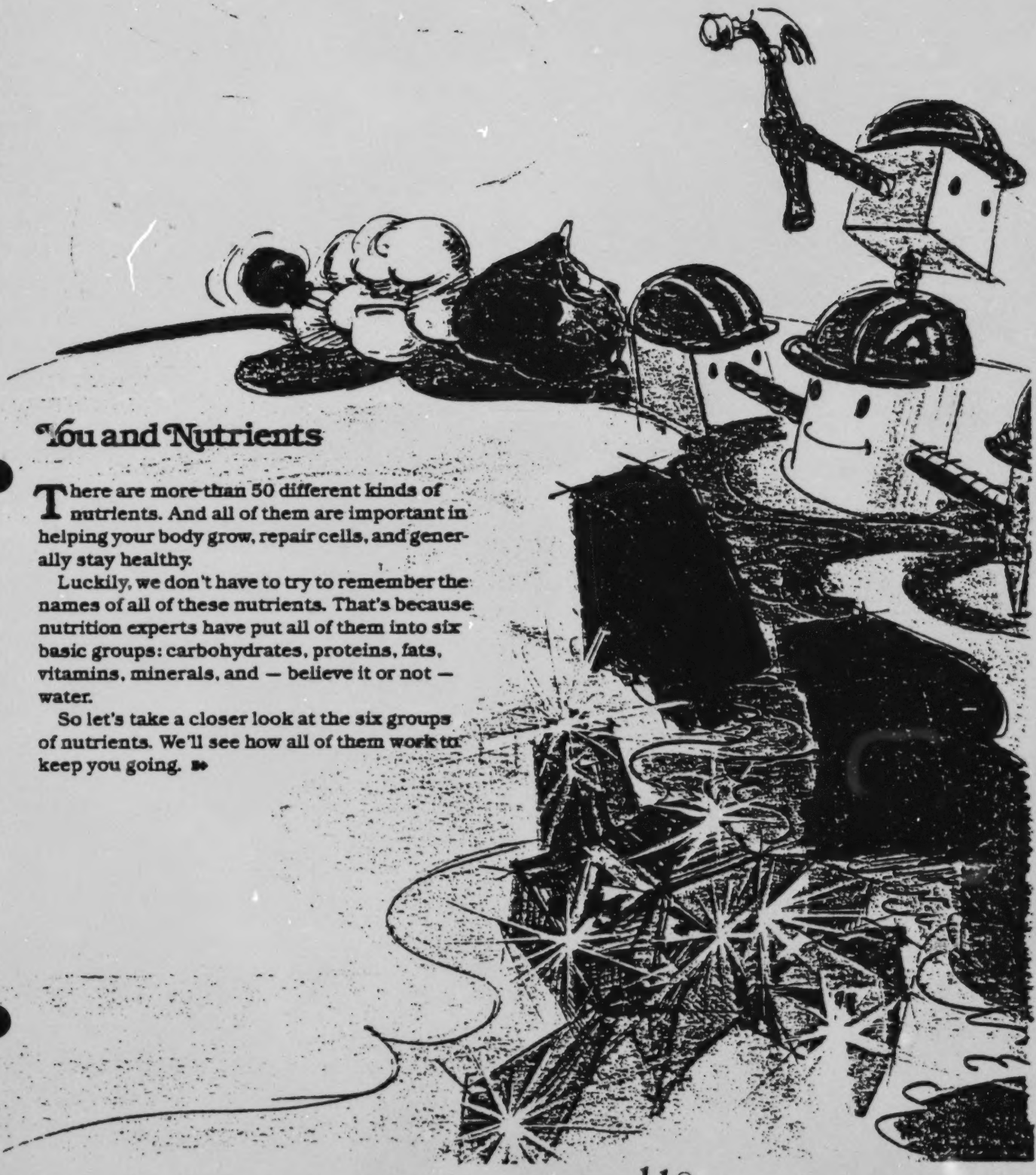
If you're thinking that all these cells must be pretty small, you're right. In fact, it would take about 40,000 of your red blood cells to fill this letter O.

Yet, each of these cells has its own life pretty much just like yours. It takes in food, grows, produces itself, and, like all other living things, it eventually dies.

Different groups of cells make up different parts of your body — like your bones and your skin and your muscles and your blood. And each group of cells has its own unique job to do. But all these cells need nutrients to do their jobs. And where do you think they get the nutrients? That's right — from the food you

PART FIVE

OBJECTIVE 4 - 2.1.3



You and Nutrients

There are more than 50 different kinds of nutrients. And all of them are important in helping your body grow, repair cells, and generally stay healthy.

Luckily, we don't have to try to remember the names of all of these nutrients. That's because nutrition experts have put all of them into six basic groups: carbohydrates, proteins, fats, vitamins, minerals, and — believe it or not — water.

So let's take a closer look at the six groups of nutrients. We'll see how all of them work to keep you going. ▸▸

PART SIX

OBJECTIVE 4 - 2.1.3

Carbohydrates For Energy

What kind of food do you think of when you hear the word *carbohydrates*?

If you're like most people, you probably think of corn on the cob, or baked potatoes, or spaghetti, or breads. And you're right.

But what about celery or a peach or table sugar? Did you know these foods are also made of carbohydrates? It's true.

The fact is that there are three different kinds of carbohydrates:

- **Sugars** are called simple carbohydrates. They are found naturally in foods like fruit, milk and some vegetables like beets and peas. Refined sugars from sugar cane and sugar beets are added to foods like candy, soda, cakes and ice cream.
- **Starches**, which are one type of complex carbohydrates, are found in foods like bread, potatoes, rice, and vegetables.
- And **fiber**, which is also a complex carbohydrate, is found in the walls of plant cells, the tough, structural parts of plants, like the stringy part of celery or the bran of wheat and other cereals. And even though humans can't digest fiber, it plays an important role. It helps move the other food through the body, and then helps the body get rid of wastes left over from digestion. Some people also think that fiber helps you feel full without eating too many calories and that it helps you to keep healthy and well.

PART SEVEN
OBJECTIVE 4 - 2.1.3

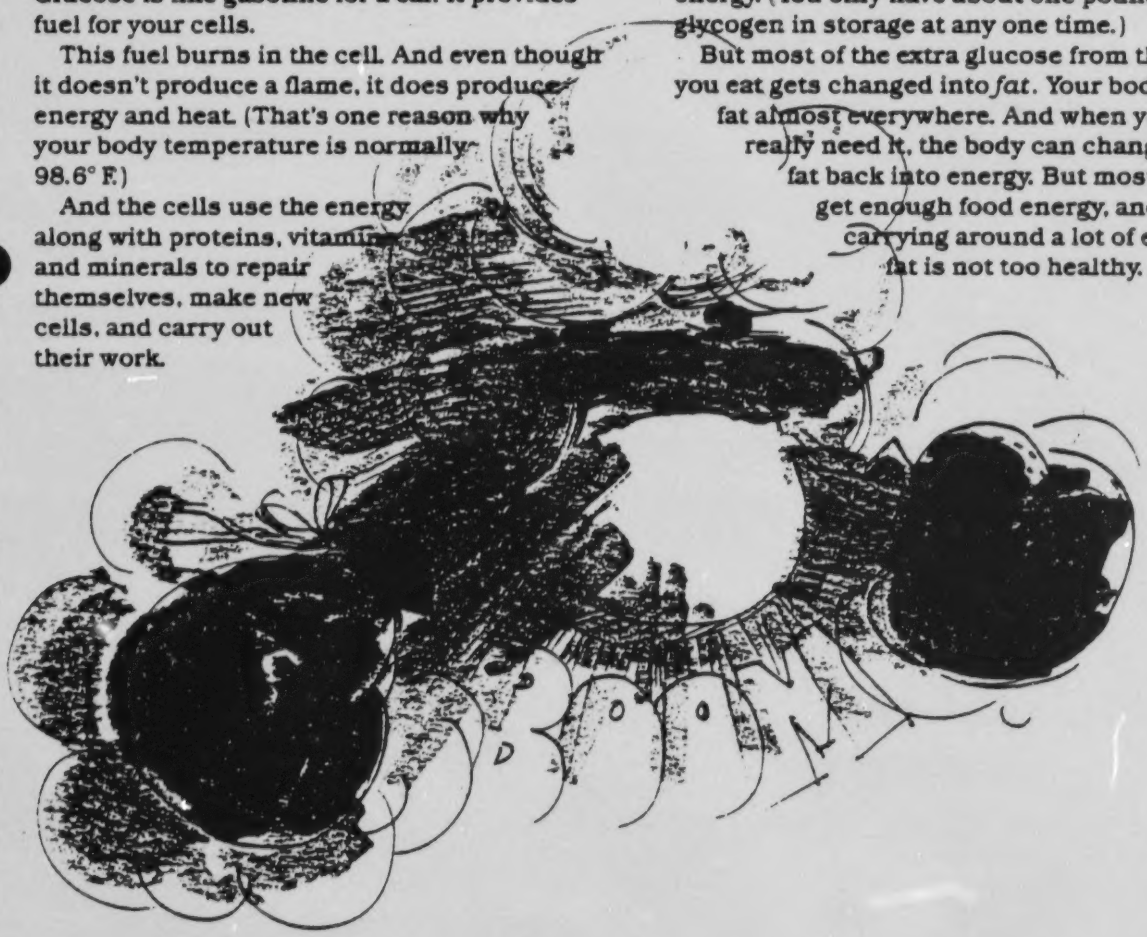
But of the three kinds of carbohydrates, starches have been the main part of people's diets for as far back as anyone can remember. And that's true even today. In Asia, for example, rice is the main part of every meal.

Carbohydrates are your main source of energy. Here's how that works.

As carbohydrates enter your body, your body changes the starches and sugar to *glucose*. Glucose is like gasoline for a car. It provides fuel for your cells.

This fuel burns in the cell. And even though it doesn't produce a flame, it does produce energy and heat. (That's one reason why your body temperature is normally 98.6° F.)

And the cells use the energy along with proteins, vitamins and minerals to repair themselves, make new cells, and carry out their work.

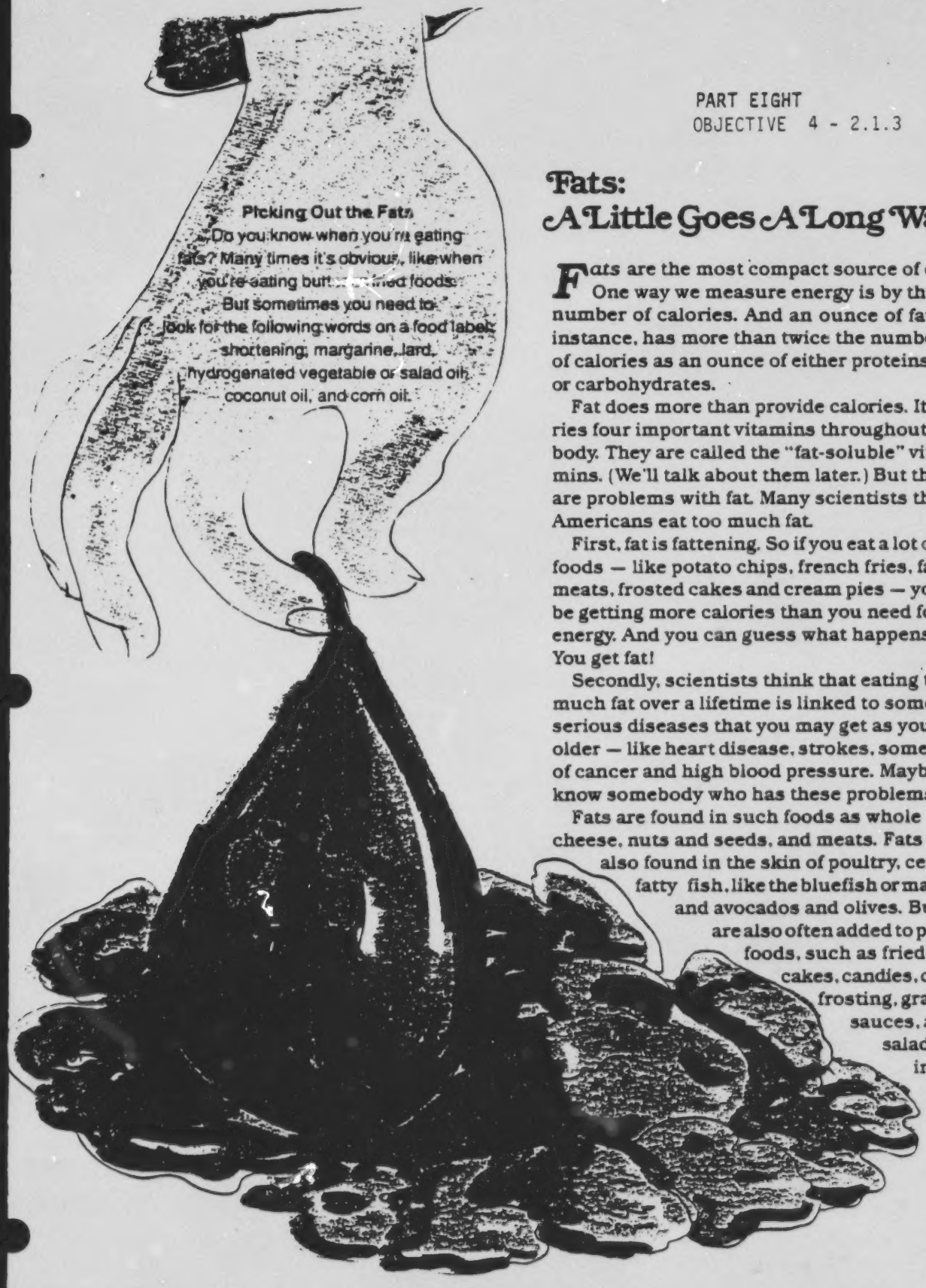


Whenever you eat more carbohydrates than your body needs, two things happen. A little of that extra glucose gets changed into another substance. This is called *glycogen*. Your body stores the glycogen for when you need extra energy — like when you decide to race your brother to the corner grocery store. Your body then changes the glycogen back into glucose so that it can send it to the cells to use for energy. (You only have about one pound of glycogen in storage at any one time.)

But most of the extra glucose from the food you eat gets changed into *fat*. Your body stores fat almost everywhere. And when you really need it, the body can change that fat back into energy. But most of us get enough food energy, and carrying around a lot of extra fat is not too healthy. »

PART EIGHT
OBJECTIVE 4 - 2.1.3

Fats: A Little Goes A Long Way


Picking Out the Fats
Do you know when you're eating fats? Many times it's obvious, like when you're eating buttered foods. But sometimes you need to look for the following words on a food label: shortening, margarine, lard, hydrogenated vegetable or salad oil, coconut oil, and corn oil.

Fats are the most compact source of energy. One way we measure energy is by the number of calories. And an ounce of fat, for instance, has more than twice the number of calories as an ounce of either proteins or carbohydrates.

Fat does more than provide calories. It carries four important vitamins throughout your body. They are called the "fat-soluble" vitamins. (We'll talk about them later.) But there are problems with fat. Many scientists think Americans eat too much fat.

First, fat is fattening. So if you eat a lot of fatty foods — like potato chips, french fries, fatty meats, frosted cakes and cream pies — you may be getting more calories than you need for energy. And you can guess what happens then! You get fat!

Secondly, scientists think that eating too much fat over a lifetime is linked to some very serious diseases that you may get as you grow older — like heart disease, strokes, some kinds of cancer and high blood pressure. Maybe you know somebody who has these problems.

Fats are found in such foods as whole milk, cheese, nuts and seeds, and meats. Fats are also found in the skin of poultry, certain fatty fish, like the bluefish or mackerel, and avocados and olives. But fats are also often added to prepared foods, such as fried foods, cakes, candies, cookies, frosting, gravies, sauces, and salad dressings. »

Protein: Your Body's Building Blocks

Nearly everything in your body is made up of *protein*. This includes your hair, bones, muscles, teeth — even your brain.

The protein you eat gets broken down and built back up into all these parts of your body. You need protein to build cells and to repair them. As much as 3 to 5 percent of the protein in your body is replaced each day. Red blood cells live for only about 120 days. Cells in the lining of your small intestine get worn out in a few days and have to be replaced. So you're really not the kid you were even a few weeks ago.

There are certain times of life when you need extra protein — like now when you are growing, or when you're recovering from injury. When you get older, and as your growth slows, you will need less protein.

What foods have protein? Most people think first of meat, fish and chicken. But milk, nuts, cheese, peanut butter, eggs, beans, and grains also have protein.

But you don't have to worry about getting enough protein. Most of us in this country get much more than we need.

Completing the Protein Picture

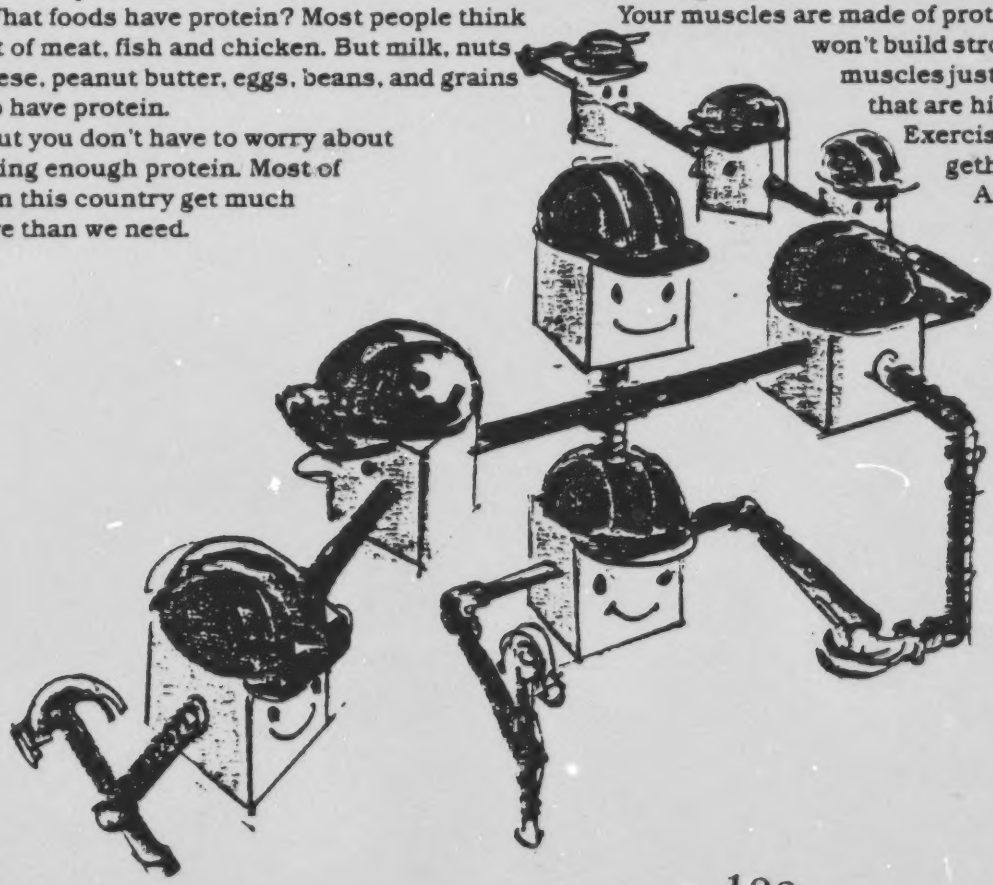
Proteins are not all alike. They vary in the number of building blocks they have for your cells to use. Therefore, you should eat a variety of protein foods in order to keep your cells growing and working right.

Most people in the world get their proteins from two or more sources.

Mexican people, for example, eat red beans and corn meal tortillas; Chinese people soybean cakes and rice; Arabic people eat chick peas and cracked wheat. You eat peanut butter sandwiches, for example, or cereal and milk, or macaroni and cheese. These foods not only taste good together, they work together for you in your body.

Building the Next Mr. America

Your muscles are made of protein. But you won't build stronger or bigger muscles just by eating foods that are high in protein. Exercise and food together build muscles. And if you eat a lot of extra protein without exercising, that protein will be turned into fat. And who needs that?



PART TEN
OBJECTIVE 4 - 2.1.3

Vitamins: For Good Health

Vitamins are very tricky chemicals. They don't give us energy. But we do need them in the right amounts for our cells to do their work.

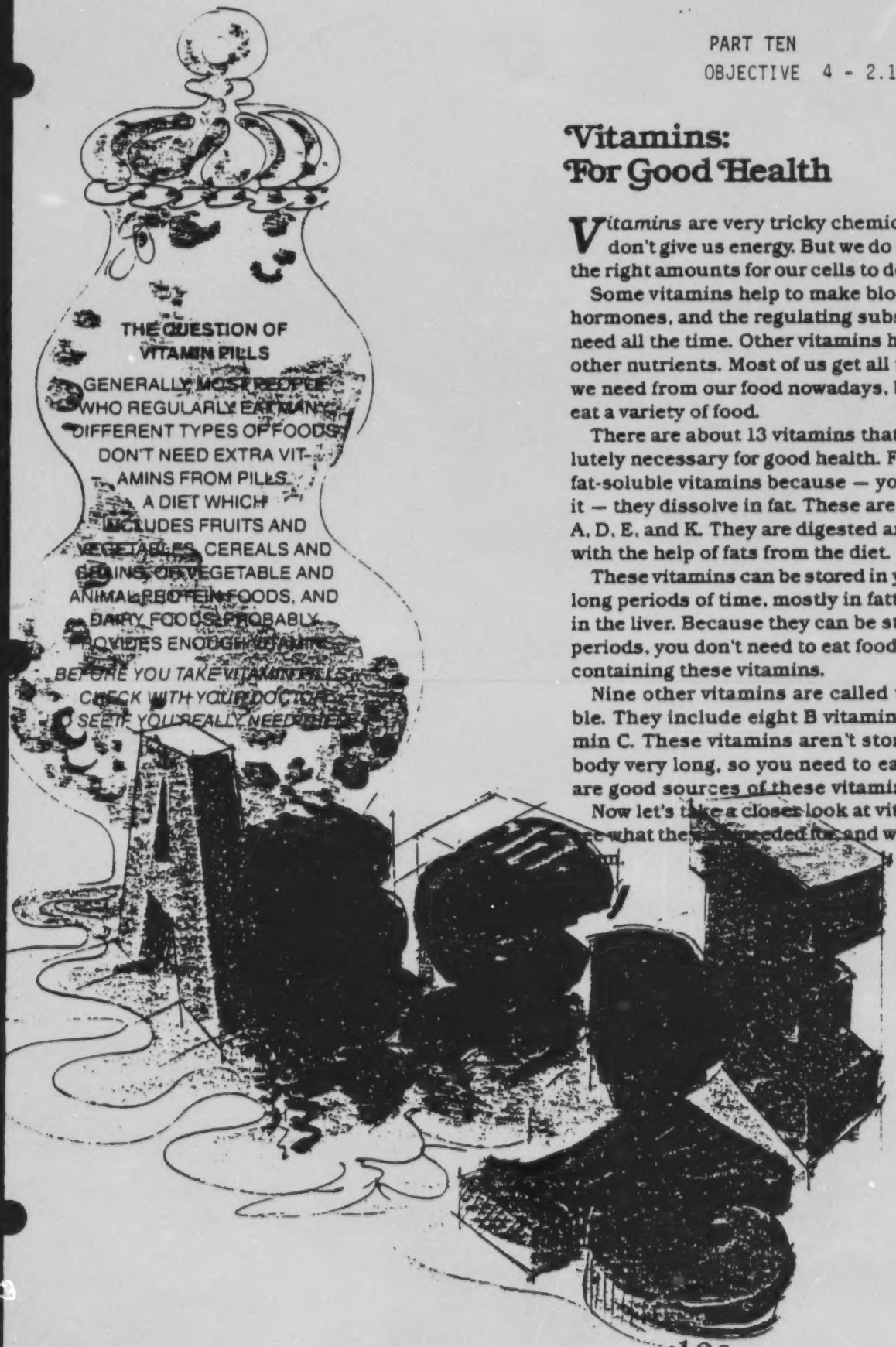
Some vitamins help to make blood cells, hormones, and the regulating substances you need all the time. Other vitamins help you use other nutrients. Most of us get all the vitamins we need from our food nowadays, because we eat a variety of food.

There are about 13 vitamins that are absolutely necessary for good health. Four are called fat-soluble vitamins because — you guessed it — they dissolve in fat. These are vitamins A, D, E, and K. They are digested and absorbed with the help of fats from the diet.

These vitamins can be stored in your body for long periods of time, mostly in fatty tissue and in the liver. Because they can be stored for long periods, you don't need to eat foods every day containing these vitamins.

Nine other vitamins are called water-soluble. They include eight B vitamins, and vitamin C. These vitamins aren't stored in your body very long, so you need to eat foods that are good sources of these vitamins every day.

Now let's take a closer look at vitamins. We'll see what they're needed for and where you get them.


THE QUESTION OF VITAMIN PILLS
GENERALLY, MOST PEOPLE WHO REGULARLY EAT MANY DIFFERENT TYPES OF FOODS DON'T NEED EXTRA VITAMINS FROM PILLS. A DIET WHICH INCLUDES FRUITS AND VEGETABLES, CEREALS AND GRAINS, OR VEGETABLE AND ANIMAL PROTEIN FOODS, AND DAIRY FOODS, PROBABLY PROVIDES ENOUGH VITAMINS.
BEFORE YOU TAKE VITAMIN PILLS, CHECK WITH YOUR DOCTOR TO SEE IF YOU REALLY NEED THEM.

PART ELEVEN

OBJECTIVE 4 - 2.1.3

Vitamin A

A

Needed for good vision, healthy skin, strong bones, and wound healing.

Found in yellow, orange, and green vegetables; yellow fruits; and in the fat of animal products like fish, milk, eggs, and liver.

B Vitamins

B

Needed for using protein, fat, carbohydrates; for keeping eyes, skin, and mouth healthy; for development work of the brain; and for the nervous system.

Found in many foods such as whole grain and enriched cereals and breads, meats and beans.

Vitamin C

C

Needed for wound healing; for development of blood vessels, bones, teeth, and other tissues; and for minerals to be used by the body.

Found in food like citrus fruits, melons, berries, leafy green vegetables, broccoli, cabbage, and spinach.

Vitamin D

D

Needed for using calcium and phosphorus to build strong bones and teeth. It's a vitamin your skin produces when getting sunshine.

Found in fatty fish, liver, eggs, butter; added to most milk.

Vitamin E

E

Helps preserve the cell tissues.

It is found in a wide variety of foods, and most people get enough.

Vegetable oils and whole grain cereals are especially rich sources.

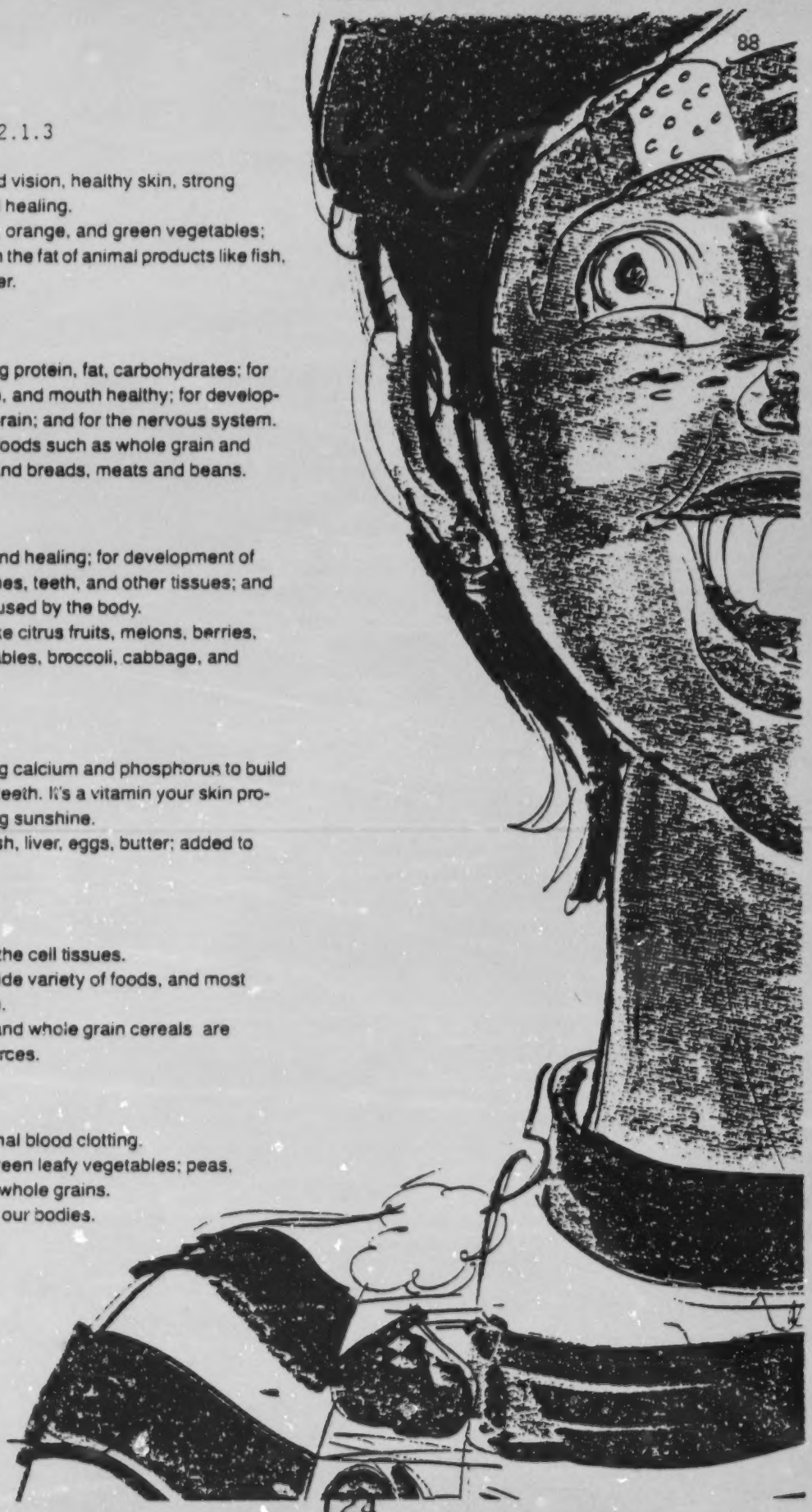
Vitamin K

K

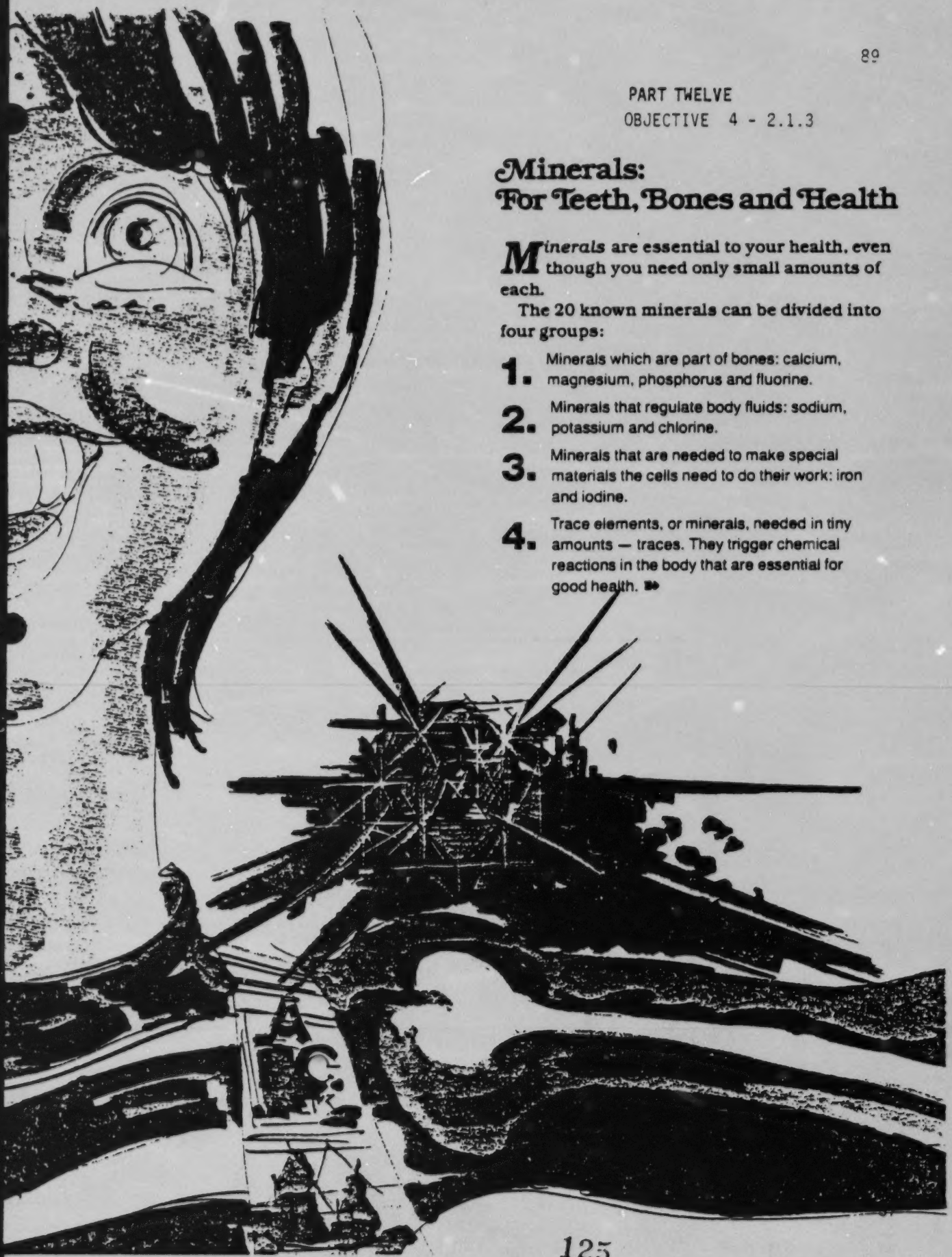
Needed for normal blood clotting.

Found in dark green leafy vegetables; peas, cauliflower, and in whole grains.

It's also made in our bodies.



PART TWELVE
OBJECTIVE 4 - 2.1.3



Minerals: For Teeth, Bones and Health

Minerals are essential to your health, even though you need only small amounts of each.

The 20 known minerals can be divided into four groups:

1. Minerals which are part of bones: calcium, magnesium, phosphorus and fluorine.
2. Minerals that regulate body fluids: sodium, potassium and chlorine.
3. Minerals that are needed to make special materials the cells need to do their work: iron and iodine.
4. Trace elements, or minerals, needed in tiny amounts — traces. They trigger chemical reactions in the body that are essential for good health. ➠

OBJECTIVE 4 - 2.1.3

PART THIRTEEN
PART FOURTEEN
PART FIFTEEN
PART SIXTEEN

1. Bone Minerals

Bone mineral: calcium, magnesium, phosphorus and fluorine.

Calcium is the mineral we need the most. Calcium makes bones and teeth strong and sturdy and is found in milk products.

Magnesium helps bones and muscles do their work, and helps turn food into energy. It also helps the body use certain vitamins. You get this mineral in nuts, seeds, dark green vegetables, and whole grain products.

Phosporus works with calcium in making bone and teeth. Phosphorus is very plentiful in a typical American diet.

Fluorine is also important for strong bones and teeth. It helps prevent cavities. It is found in seafood and in some plants. But many of us get our supply from the fluorine added to drinking water.

2. Fluid Regulating Minerals

These minerals include sodium, potassium, and chlorine:

More than half your body is water. And these minerals help keep the right amounts of water inside the cells — while keeping the rest out.

3. Material Makers

Minerals that make materials: These minerals include iron, iodine, and sulfur:

Iron carries oxygen in your blood. The best sources of iron are meats (especially liver). But foods from some plants — like beans, green leafy vegetables, and grains — are good sources of iron, especially when eaten along with foods rich in vitamin C. An example is drinking some orange juice with your whole wheat toast in the morning. The vitamin C helps your body absorb iron better.

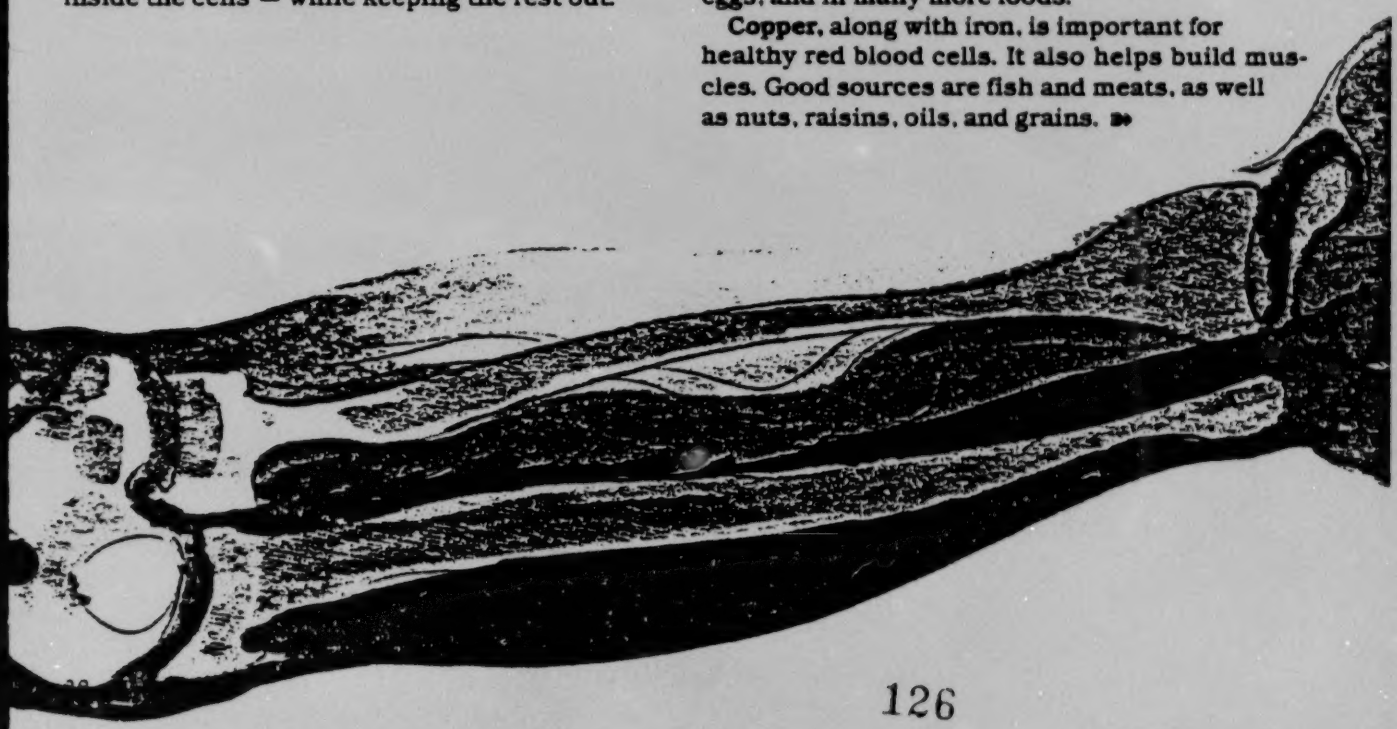
Iodine is needed to make a hormone produced by the thyroid gland, which controls growth. Many years ago people worried about getting a disease called goiter, because they didn't get enough iodine. But now we don't worry because iodine is added to salt.

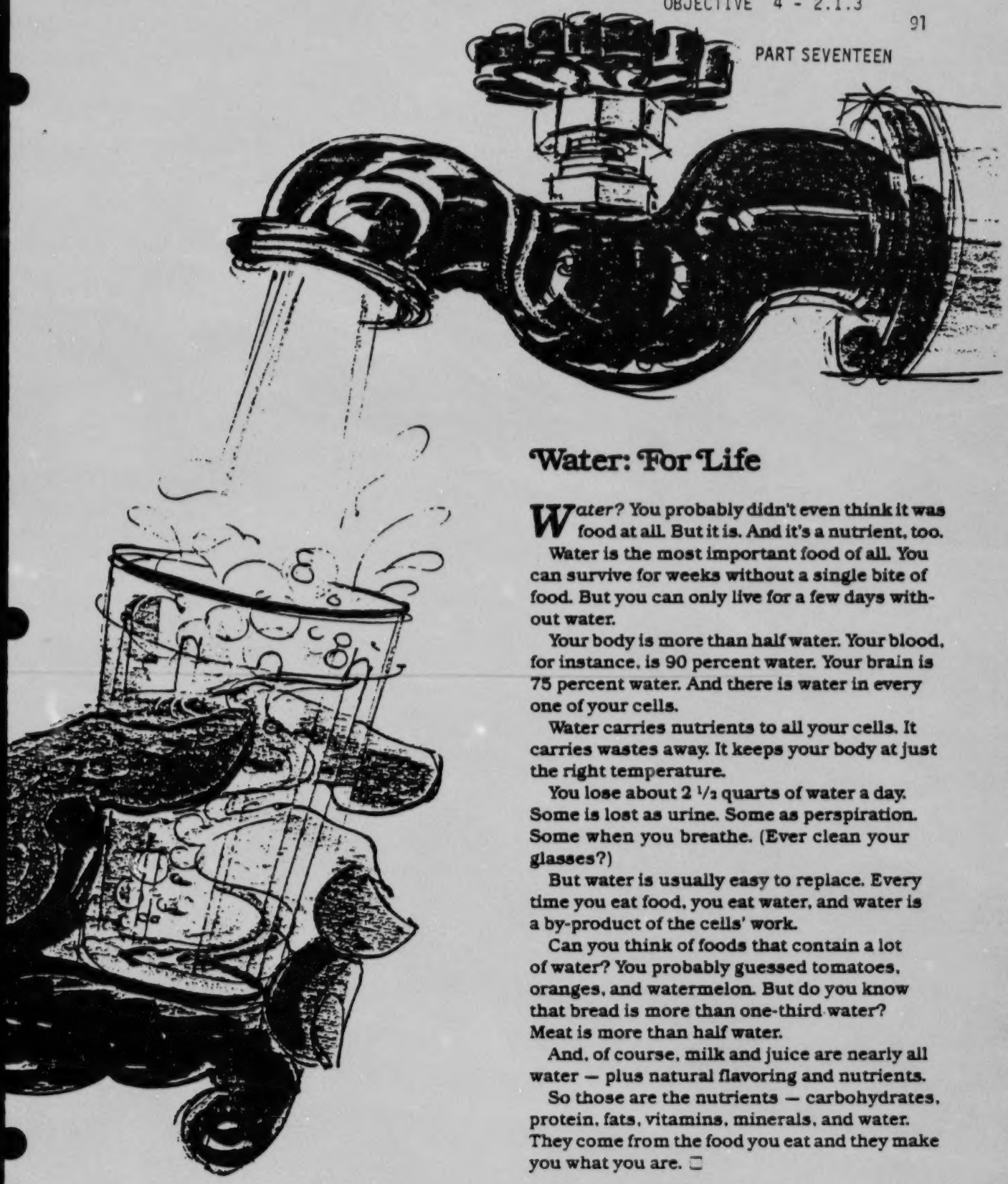
4. Trace Elements

There are more than 17 trace minerals. Zinc and copper are two examples.

Zinc helps you grow, taste, make proteins, and heal wounds. You get zinc in whole grain bread and cereals, beans, meats, shellfish, eggs, and in many more foods.

Copper, along with iron, is important for healthy red blood cells. It also helps build muscles. Good sources are fish and meats, as well as nuts, raisins, oils, and grains. »





Water: For Life

Water? You probably didn't even think it was food at all. But it is. And it's a nutrient, too.

Water is the most important food of all. You can survive for weeks without a single bite of food. But you can only live for a few days without water.

Your body is more than half water. Your blood, for instance, is 90 percent water. Your brain is 75 percent water. And there is water in every one of your cells.

Water carries nutrients to all your cells. It carries wastes away. It keeps your body at just the right temperature.

You lose about 2 ½ quarts of water a day. Some is lost as urine. Some as perspiration. Some when you breathe. (Ever clean your glasses?)

But water is usually easy to replace. Every time you eat food, you eat water, and water is a by-product of the cells' work.

Can you think of foods that contain a lot of water? You probably guessed tomatoes, oranges, and watermelon. But do you know that bread is more than one-third water? Meat is more than half water.

And, of course, milk and juice are nearly all water — plus natural flavoring and nutrients.

So those are the nutrients — carbohydrates, protein, fats, vitamins, minerals, and water. They come from the food you eat and they make you what you are. □

OBJECTIVES 4 - 2.1.3

EVALUATION SHEET: YOU AND NUTRIENTS

Choose from the wordbank below to find the word that answers the the following sentences. Several words will be used twice.

WORD BANK

carbohydrates	fats	starches
protein	twenty	fiber
Vitamin E	sugars	water
Vitamin D	calcium	Vitamin C
fat		

1. Your main sources of energy are your _____.
2. Green leafy vegetables are an important source of _____.
3. Sunshine contains _____.
4. The most compact sources of energy are _____.
5. Nearly everything in your body is made of _____.
6. The three basic carbohydrates are _____, _____, and _____.
7. When you get older, and as your growth slows, you will need less _____.
8. The vitamin which helps preserve the cell tissues is _____.
9. There are _____known minerals.
10. The mineral which we need the most is _____.
11. The nutrient found in prepared foods, such as frostings, sauces, and salad dressings is _____.
12. More than one-half of your body is _____.
13. Fish, meat and chicken are a major source of _____.
14. _____ carries nutrients to all of your cells.
15. Eating too much _____ over a lifetime is linked to some very serious diseases that you may get as you grow older.

Review Key

YOU AND NUTRIENTS

1. carbohydrates
2. vitamin C
3. vitamin D
4. fats
5. protein
6. sugars, starches and fiber
7. protein
8. vitamin E
9. twenty
10. calcium
11. fat
12. water
13. protein
14. water
15. fat

LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Proper Nutrition	4.C.2, 4.C.8	Two 45-minute periods

OBJECTIVE 4 - 2.1.4 Describe how proper nutrition aids in the digestive process.

INSTRUCTIONAL MATERIALS:

U. S. Department of Agriculture, What's To Eat? And Other Questions Kids Ask About Food, Washington, D.C.: (Governmental Printing Office, 1979), pp. 90-97
"Food Groups" (Masters included, book is available in your media center.)
Activity Sheet: "A Balanced Menu" (Master included, make a copy for each Student.)
School Lunchroom Menu for One Week (Obtain from cafeteria manager or newspaper)

PROCEDURE:

Discuss the following with students.
There are all kinds of special diets today. How do you know which one provides all your nutritional needs? Nutrition experts say everyone, overweight, thin and athletes included, just needs a balanced diet, and the right amount of calories. What does a balanced diet mean? (eating some from all of the four food groups each day)

Put the following question on the chalkboard.
Which one of the following provides all the nutrients you need in one day?

(A) Three servings of spinach
(B) Three glasses of milk, plus two chicken eggs
(C) Three slices bread, plus an orange
(D) None of the above

Those that answered none of the above are on the way to understanding a balanced diet. Explain that eating a balanced diet is like a jigsaw puzzle. Eating different types of food puts all the pieces together. The puzzle is easy to put together when we know how many foods from each of the four food groups to eat each day. Nutrition experts recommend 3-2-4-4. (three dairy, two meat, four grain, and four fruit and vegetable)

Divide students into five groups. Distribute background information sheets on the five food groups (one food group to a group). Have students read to find out the following information.
What nutrients does this group provide?
How much should you eat each day?
What are some examples from each of these groups?

Have each group report its findings to the class.

OBJECTIVE 4 - 2.1.4

EVALUATION:

Distribute Activity Sheet "A Balanced Menu." Have students plan a balanced meal for breakfast, lunch, and dinner for one day.

ENRICHMENT/REINFORCEMENT:

Discuss the school lunchroom menu for one week. Have students analyze it to see if it provides a balanced meal each day for lunch.

Brainstorm all the foods the students can think of that are part of a balanced diet.

Have students volunteer to share how they feel after they have eaten a balanced meal and after they have eaten a meal that is not balanced.

VEGETABLE FRUIT Group

You've probably heard the old saying, "An apple a day keeps the doctor away." Well, that isn't really true, but fruits and vegetables are important foods.

Foods in This Group: The fruits include oranges, lemons, watermelons, bananas, and fresh strawberries — to name just a few. The vegetables include broccoli, spinach, carrots, green beans, tomatoes, and potatoes.

Why This Group is Important: The fruits and vegetables are important because they give you vitamins A and C, carbohydrates and fiber, among other things. Dark green and deep yellow vegetables are good sources of vitamin A. Grapefruit, oranges, berries, and melons are good sources of vitamin C. So are tomatoes and broccoli. But different foods in this group provide different amounts of these vitamins and other nutrients. So it's important to vary the ones you choose.

How Much You Should Eat: Four servings of food from this group are recommended each day. An average size orange, or a small glass of orange juice, for example, counts as one serving. So would a medium-size potato, a portion of green beans, or a small bowl of cole slaw.

Daily Diet Example: To get the four servings is easy. You might start the day with a small glass of orange juice. That would count as one serving. At lunch, if you have a salad, that would be another serving. And at dinner, you might choose some green peas and a baked potato to give you the other two servings. ➤➤

OBJECTIVE 4 - 2.1.4

BREAD CEREAL Group

Your grandparents probably ate more of these foods than you or your parents eat. That's because as people got more money, they switched from bread and pasta to meat, chicken and sweets. In addition, as Americans became more concerned with dieting and weight control, people ate less grain and cereal. They thought these foods contained lots of calories and therefore were fattening. This is not true! It's the spread on the bread, for instance, or the oily sauce on the spaghetti that adds most of the calories. In fact, this group is a good source of some important nutrients.

Foods in This Group: All products made with whole grain or enriched flour, rice and corn meal. This means such things as bread, muffins, pancakes, whole grain or ready-to-eat cereals, rice and enriched noodles of all kinds.

Why This Group Is Important: This group gives your body some of the B vitamins and some iron. Whole grain bread and cereals also contain fiber and many important minerals which are not found in refined breads and cereals, even the enriched or fortified ones.

How Much Should You Eat: Give yourself four servings from this group each day. Be sure to include whole grain bread or cereals.

Daily Diet Example: If you start your day with whole wheat toast, you're getting one of the four important servings you need from this group each day. At lunch, if you have a hamburger, the top and bottom part of the bun count as 2 servings. A small plate of spaghetti or another slice of bread at dinner can provide the fourth serving. »

Bread Talk

White bread, made from white flour, is the most common bread in this country. Other kind of bread that people are baking and buying more and more at supermarkets is whole wheat bread. Both of these breads contain important nutrients. But whole wheat bread has more fiber and some more trace minerals than white bread. So it's a good idea to include some whole wheat bread in your diet.

Whole wheat bread is light brown in color. That's because the flour the bread is made from uses the whole grain of wheat — including the parts that make flour dark, the bran and the wheat germ.

Be careful, just because bread is brown doesn't mean it's whole wheat bread. Sometimes bread manufacturers add coloring to white bread to make it look brown. It may be brown, but it's not any more nutritious.

If you want a whole grain bread, check the ingredient label to see that all the flour in the bread is *whole* grain flour. If the ingredients list things like "flour," "wheat flour" or even "unbleached enriched wheat flour," that is all white flour and it's not a whole grain bread.

Milk is probably one of the most popular of all drinks. That's good, since getting some milk every day is important. But there are other foods made from milk that can take the place of some of the milk you drink.

Food in This Group: Everything made from milk. You drink skim milk, lowfat milk, buttermilk, or whole milk. But milk products, such as cheese, yogurt and cottage cheese, are also good.

Why This Group Is Important: You get the mineral calcium and several vitamins from this group.

How Much Should You Eat: If you're between the ages of 9 and 12, you should have three servings from this group each day. Teenagers should have four servings.

Daily Diet Example: You might start the day with a glass of lowfat milk and some cereal. The glass of milk can count as one serving, and the milk you put on your cereal can count as a half serving. For lunch, a grilled cheese sandwich on whole grain bread is another serving. At dinner, 1/2 cup of yogurt with berries for dessert would serve as half a serving. That adds up to the three servings you need. ▶▶

Believe it or not, dry beans are included in the meat group. In fact, a small bowl of kidney bean chili would count the same as 2 to 3 ounces of lean, cooked meat, poultry, or fish. But even though it's delicious, you wouldn't want to eat only chili all the time, would you? So here are some other foods in this group.

Foods in This Group: Chicken and fish are part of this group, as are other meats such as lean beef, veal, lamb, and pork. So are some things that you might not expect to find in this group: eggs, dry beans, dry peas, nuts, lentils, and peanuts.

Why This Group Is Important: These foods provide protein, as well as iron and zinc, vitamins B_6 and B_{12}.

How Much Should You Eat: Nutritionists tell us that two servings of 2 to 3 ounces are as much as you need of these foods each day. A serving could be a tuna salad sandwich, a piece of chicken, rice and beans, a peanut butter sandwich or a hamburger.

Daily Diet Example: At lunch, you might have bean soup. That could count as one serving. At dinner, just one medium size piece of chicken could be your second serving. »

Bet you thought we'd never get to this group, didn't you? But, sure enough, here it is. This group is a little different. The key word here is caution. Don't eat food from this group too much or too often.

Foods In This Group: Here's what's in this group. The sweets are: sugars, honey, candy, chocolate, soft drinks, fruit punches, syrups, sweet toppings, jams and jellies, cookies, pastries, cakes and pies.

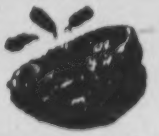
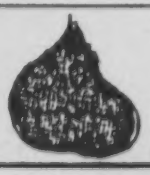
The fats are: butter, margarine, mayonnaise, other salad dressings, lard, cream cheese and fried snack-type foods, like potato chips or french fries, and fatty foods like spareribs, sausage, milk and ice cream.

Why This Group Is Important: Except for some important nutrients in vegetable oils and in a few other products, these foods provide mainly calories. It's a better idea, though, to get most of those calories from the other four food groups. You'll not only be getting the calories, but the important nutrients as well!

Daily Diet Example: Nutritionists believe you will get enough fats and sugars if you eat a balanced diet from the other food groups. Besides, you probably eat some butter or margarine on your bread and dressing on your salads. Nutritionists do not recommend a certain number of servings from this group per day, so no daily diet example is given. □

A BALANCED MENU

OBJECTIVE 4 - 2.1.4

The Five Food Groups	Breakfast	Lunch	Dinner	Snacks
1 VEGETABLE FRUIT Group 				
2 BREAD CEREAL Group				
3 MILK CHEESE Group				
4 MEAT Poultry Fish BEANS Group				
5 FATS SWEETS Group 				

LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Teeth and Digestion	4.C.8, 4.C.6, 4.W.9	45 minutes

OBJECTIVE 4 - 2.1.5 Relate the importance of teeth and their care to digestion.

INSTRUCTIONAL MATERIALS:

Kit: SVE, Slim Goodbody - Your Body, Health & Feelings,
Activity Sheet: #11
Samples of Food: carrots, apples, bananas, peanuts, bread (Have students bring these from home)
Peanuts

PROCEDURE:

Distribute a peanut to each member of the class. Ask students to try to chew the peanut without using the teeth, but not to swallow it. Then have them chew it up and swallow it. Solicite reactions from students as to the difficulty in trying to chew it without the teeth. Explain that the teeth tear and grind food into small pieces capable of being swallowed. It also breaks open the food cells and allows enzymes to begin digesting the food.

Have students volunteer to share examples of members of their family who have difficulty chewing food. (examples: babies who have no teeth, small children who have lost their baby teeth, older persons who have lost teeth and/or who wear dentures) What are some examples of food they may find difficult to eat? easy to eat?

Investigate why some foods require more chewing than others in order to be prepared to swallow by performing the following experiment. Distribute Activity Sheet #11 "Do Chew" and have students follow written directions for completing the activity.

EVALUATION:

Have students complete the following sentence.

Teeth are important in the digestive process because .....

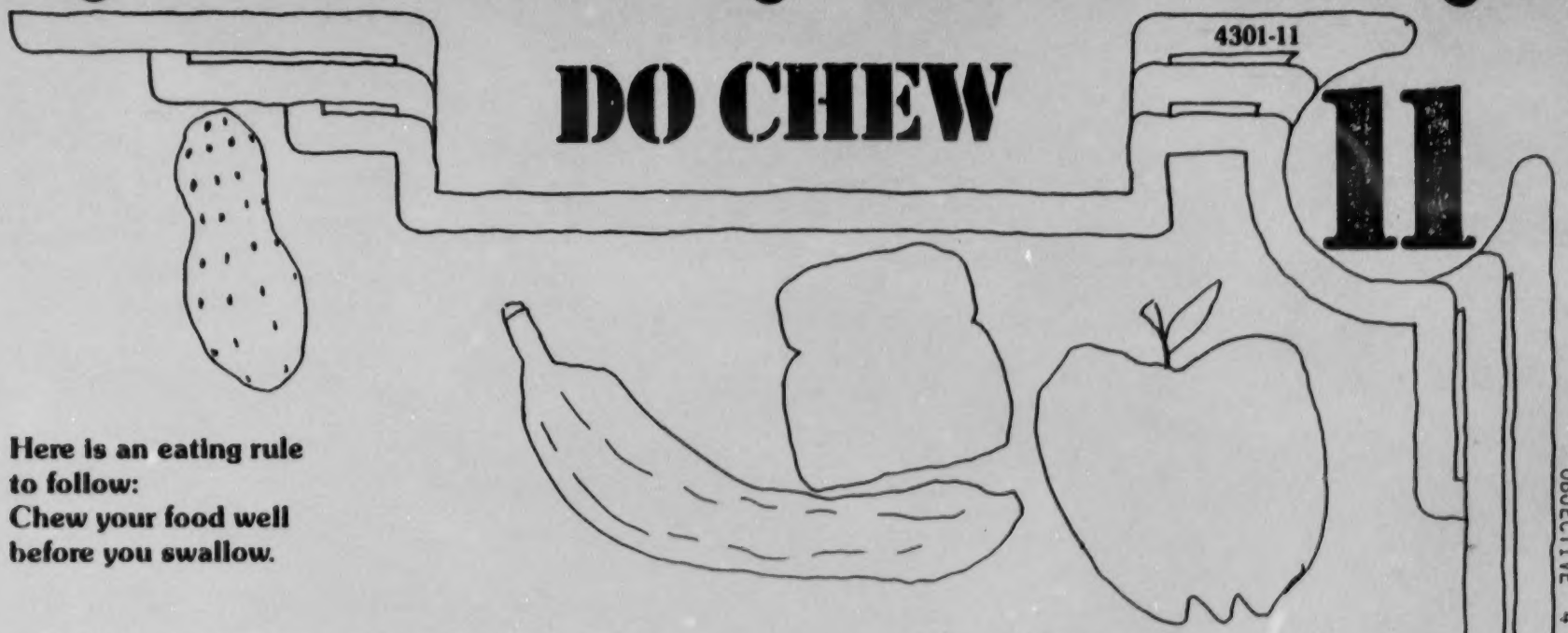
ENRICHMENT/REINFORCEMENT:

Have students calculate how many meals and snacks teeth chew in a lifetime. (calculate for 75 years)

Research animals that have teeth with specialized functions.

4301-11

DO CHEW 11



OBJECTIVE 4 - 2.1.5

Here is an eating rule to follow:
Chew your food well before you swallow.

☆ We chew different foods for different lengths of time. But you should always try to chew your food until it gets wet and soft. Bring to school a few kinds of food, such as:

- A carrot
- An apple
- A banana
- A peanut
- A slice of bread

You can also bring other foods. Put a piece of food in your mouth. Count how many chews it takes for the food to get wet and soft. Write this number on the Chew Chart below.

Use the crayon color that most closely matches the color of the food. Chew the other foods. Write the number of chews on the Chew Chart.

Chew Chart

	Number of Chews
Carrot	
Apple	
Banana	
Peanut	
Bread	

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LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Teeth and Digestion	4.C.1, 4.C.7, 4.C.6	45 minutes

OBJECTIVE 4 - 2.1.5 Relate the importance of teeth and their care of digestion.

INSTRUCTIONAL MATERIALS:

Filmstrip Series: Dairy and Food Nutrition Council of Florida, Toothtown U.S.A
Filmstrip: "Dietary Habits and Oral Health"
Evaluation Sheet: "Healthy Snacks" (Master included, make a copy for each student)

SUPPLEMENTARY:

Max Kusinitz, "Say Cheeeeese...And Prevent a Cavity?" Scholastic Science World April 1981, p. 10 (Reprinted by permission of Scholastic, Inc. from Science World Magazine. Copyright (c) 1981, by Scholastic Inc.)

PROCEDURE:

Introduce lesson to students by explaining that the foods we eat influence the health of our teeth. In order for our teeth to last for a lifetime of chewing food, it is important to eat foods which do not promote tooth decay.

Define dental plaque. (a sticky colorless film made up of saliva and bacteria that forms on the teeth and provides a favorable climate for increased bacterial growth.)

Ask students to brainstorm all the foods they can think of which promote tooth decay. Afterwards conclude that the key is sugar. It is the combination of bacteria and sugar which produces acid that decays the teeth.

Show filmstrip Unit Two, Toothtown U.S.A., "Dietary Habits and Oral Health".

EVALUATION:

Have students classify snacks into orally safe and orally hazardous categories. Distribute activity sheet "Healthy Snacks" and have students follow written directions for completing the activity.

Objective 4 - 2.1.5

ENRICHMENT/REINFORCEMENT:

Discuss with students the article, "Say Cheeeeese... And Prevent A Cavity?"

Have students keep a snack food diary for three days. Classify each snack as orally safe or orally hazardous.

Demonstrate the detrimental action of acid on teeth by using chicken bones or egg shells and a cola soft drink (high in phosphoric acid). Vinegar may also be used for acid. Have students soak the bones or egg shells in the acid liquid and check periodically for softening of the bones or shells. Relate findings to the action of mouth acid, which gradually dissolves part of the tooth, thus leading to decay.

OBJECTIVE 4 - 2.1.5

Evaluation Sheet "Healthy Snacks"

Classify the following words into the proper category column below.

milk	cake	soft drinks	hamburgers
candy	cookies	carrots	nuts
cheese	pizza	eggs	gum
yogurt	pie	jelly	doughnuts
apple	celery	popcorn	sweetened cereal

ORALLY SAFE	ORALLY HAZARDOUS

NEWS

SPECIAL

SAY **CHEEEEESE...** AND PREVENT A CAVITY?

Cheddar cheese may interfere with the process of tooth decay, according to recent scientific research.

A British researcher showed that when rats ate cheddar cheese immediately after eating sugar, the cheese had a *cariostatic* (decay-slowing) effect. Sugar is known to cause cavities. It is used by the bacteria (called *Streptococcus mutans*) that live on the teeth. These bacteria leave behind acid as a waste product of the sugar. The acid causes tooth decay.

How does the cheese slow down decay?

Scientists aren't positive yet. But Dr. William H. Bowen, chief of caries (cavity) prevention and research at the National Institute of Dental Research (NIDR), Washington, D.C., thinks that the cheese might interfere with the acid — preventing it from attacking the teeth. Or, the cheese might interfere directly with the bacteria. But no one knows *how* it might interfere.

In other experiments using rats, the NIDR also found that heavily sweetened cereals will probably cause tooth decay whether they contain eight percent sugar or 80 percent sugar! Why? Because the bacteria can probably do their damage using a lot less sugar than is found in the most heavily sweetened cereals. But, if the food additive called *dicalcium phosphate* is added, the sweetened cereal is less likely to cause cavities.

Also, peanuts didn't seem to cause cavities, but potato chips were more likely than caramel or chocolate bars to cause cavities!

It appears that the two most important factors that determine whether you will get cavities from eating certain foods are, (1) the *presence* or *absence* of sugar, and (2) *how often* the food is eaten.

Of course, the main reason you'll get cavities is because of the *Streptococcus mutans* in your mouth. But scientists are now studying ways to substitute harmless bacteria on the teeth early in life, before the acid-producing bacteria get a chance to grow there in large numbers. That way, there won't be room for the acid-producing type. So, in the future, we may be using *bacteria* to prevent cavities! —*Marc Kusinitz*

LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Teeth and Digestion	4.C.2	45 minutes

OBJECTIVE 4 - 2.1.5 Relate the importance of teeth and their care to digestion.

INSTRUCTIONAL MATERIALS:

Filmstrip Series: Dairy and Food Nutrition Council of Florida, Toothtown U.S.A.
Filmstrip: "Personal Dental Care"

PROCEDURE:

Explain to students that another way to make sure teeth last for a lifetime is to clean them thoroughly each day to remove acid and bacteria that form plaque.

Show filmstrip, Unit Three, Toothtown U.S.A., "Personal Dental Care" to illustrate the proper cleaning techniques.

EVALUATION:

Have students demonstrate proper brushing on a large tooth model with a large toothbrush if available. The large teeth on the end of the Toothtown U.S.A. box may also be used.

Have students demonstrate flossing by choosing a partner and using string and their partners hands. One student holds hands together with fingers straight and tightly together.

ENRICHMENT/REINFORCEMENT:

Show Unit Four filmstrip Toothtown U.S.A., "Professional Dental Care" to identify the members of a dental health team and their role in maintaining the health and cleanliness of teeth.

GRADE LEVEL: Fourth

THEME: Physical, Mental, and Social Health

PRIMARY IDEA: 4 - 2.0 Development in individuals may be altered by factors in the enrivonment

SECONDARY IDEAS	OBJECTIVES
4 - 2.2 Students will apply scientific principles in selecting health products and services.	Given proper materials and directions, students will do the following: 4 - 2.2.1 describe advertising techniques used to influence consumers to buy products and services; 4 - 2.2.2 compare labels of major health products available to the consumer; and 4 - 2.2.3 identify the criteria for the proper selection of health products and services.

LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Advertising Techniques	4.C.8	45 minutes

OBJECTIVE 4 - 2.2.1 Describe advertising techniques used to influence consumers to buy products and services.

INSTRUCTIONAL MATERIALS:

3M Company, School Health Education Study, Concept 8, Level II-B, "Transparencies A and D." (Masters included, colored set available in your media center.)
3M Company, School Health Education Study, Concept 8, Level III-A, "Transparencies B, C, G, H, I, and J." (Masters included)
Manila drawing paper
Crayons
Magazines
Newspapers

PROCEDURES:

There are various advertising techniques used to influence consumers to buy products and services.

The following pictures illustrate some of the ways in which health information traveled in early days, compared to the impact of communications media today.

Show each transparency and use suggested questions to stimulate discussion.

Transparency A
Which of these is still an important means of communication today?
What are other ways in which we hear or read about health information, products, or services? (Example: drug store and grocery displays, direct mail, ads in buses, telephone directories, etc.)
How could you compare the medicine show pitchmen's spiels with commercials of today's radio and television?

Transparency B
What are some advertising techniques of today shown here?
How are they different from the ways of the past?

Transparency C
Why do we have so many types of advertising?
What type of information can we learn from advertising?

Transparency D
What is the significance of the advertisement for the film appearing on the billboard?

OBJECTIVE 4 - 2.2.1

Transparency G
How does television bring consumer information to people today? How does television combine appeal to both eye and ear?

Transparency H
How does the radio bring consumer information to people today?

Transparency I
How would advertisements in newspapers bring information to the consumer? What advertisements would be used in different types of magazines?

Transparency J
How would advertisements in newspapers bring information to the consumer? What are some advertisements which you have seen or read in the newspaper?

EVALUATION:

Have students write one example on paper of five of the following advertising techniques.

billboard	newspaper	radio	telephone directory
magazine	television	display ad	direct mail ad

ENRICHMENT/REINFORCEMENT:

Have students choose one technique which is used for advertising. Have them bring in samples of their chosen technique and share this information with the class.

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And it relieves that achy feeling
For a Breakfast that will...
FLAKES
Please read this
Hotsicola hits the SPOT...
Eat Candy
-Advertise- the Daily Beat
We're Told About Products and Services in Many Ways

We Have Advertising Because We Have...

Purchasers

Many Products and services

Different brands of same product and forms of same service

Advertising

Gives you information and "feeling" about a product or service

Encourages you to purchase a particular brand of product or form of service

Provides one basis for reinforcing your satisfaction after you purchase

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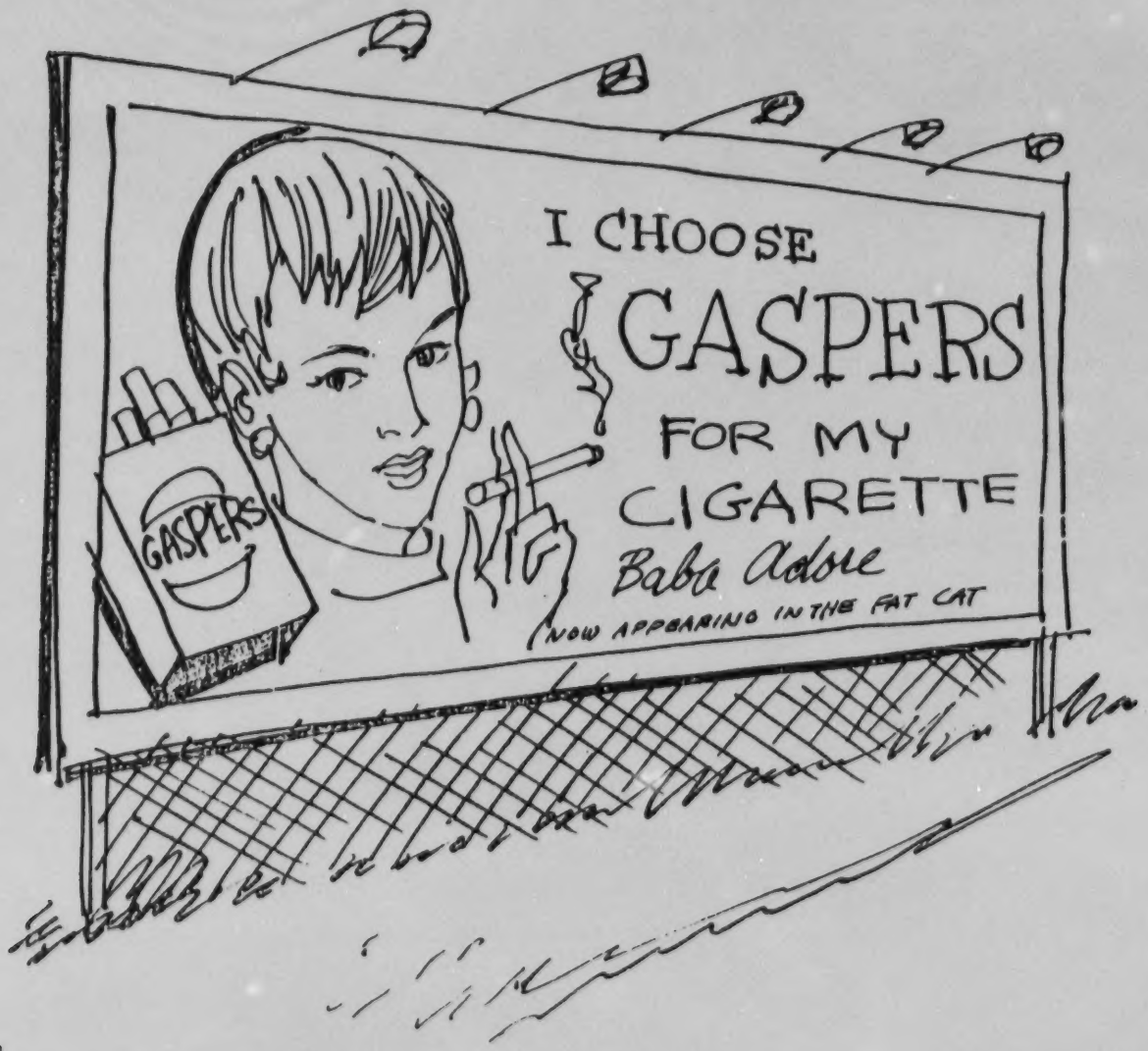
TODAY!



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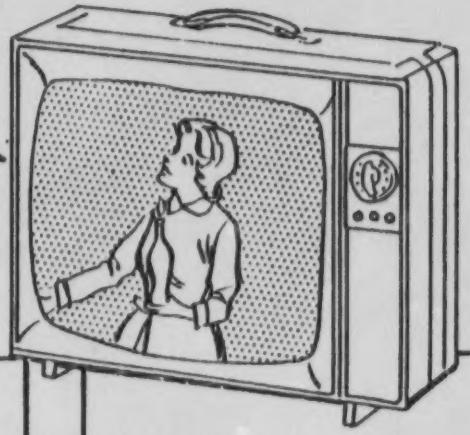
Advertising On Television

Slogans

Short Exposure
10-60 Seconds

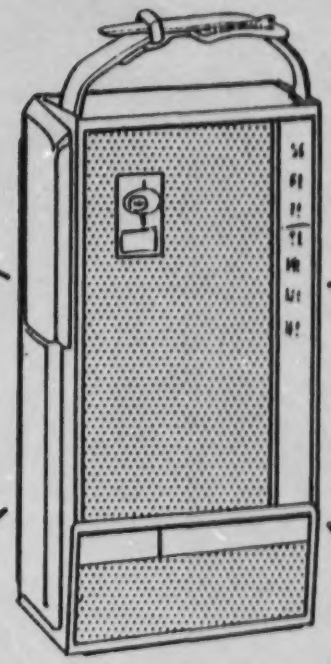


Information

Moving
Picture With
Sound And,
Perhaps, Color

Means To
Identify With
Product

Advertising On Radio



Slogans

Short Exposure 10-30 Seconds

Public Service Announce-ments

Often Is Geared To Youth-Between Musical Selections

Words, Music And Other Sounds

161

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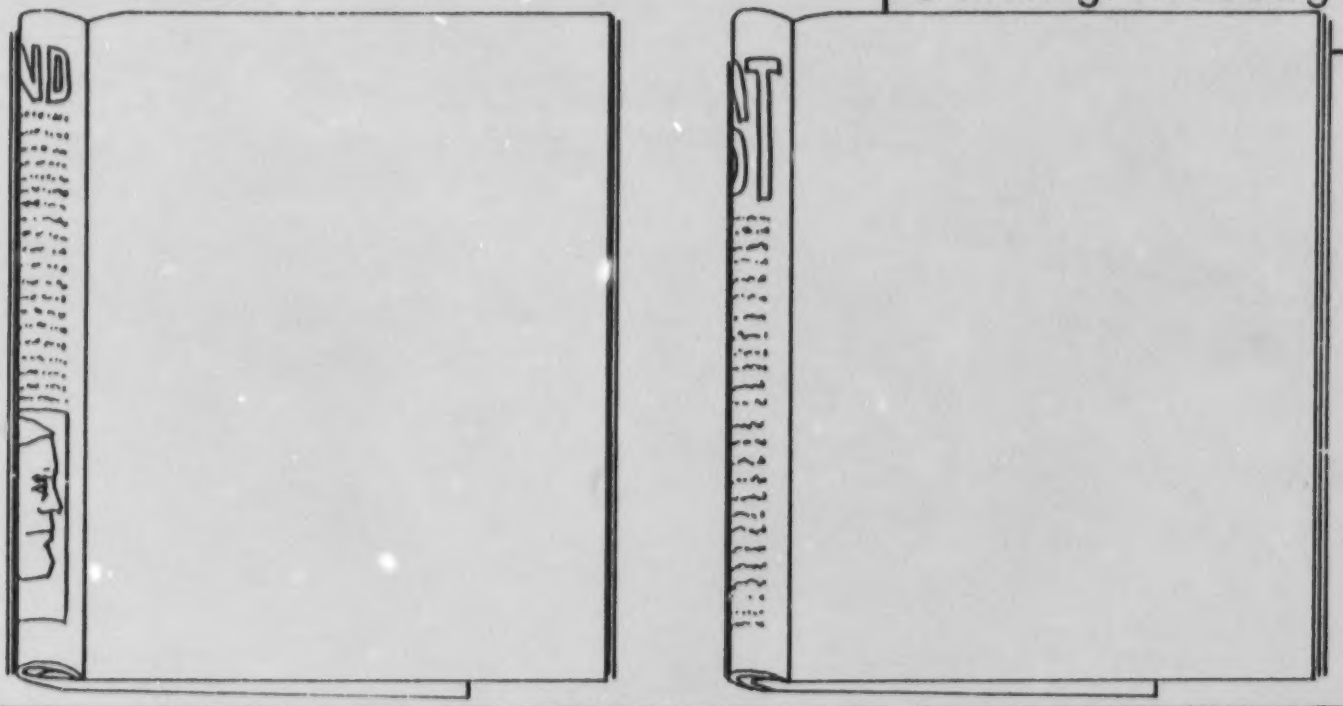
Transparency I Objective 4 - 2.2.1

Advertising in Magazines

Slogans

Picture and Information–No Time Limit for Getting Message



Different Sizes of Ads

Different Places in Magazine

Different Ads in Different Magazines

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Large Daily Readership

Advertising in Newspapers

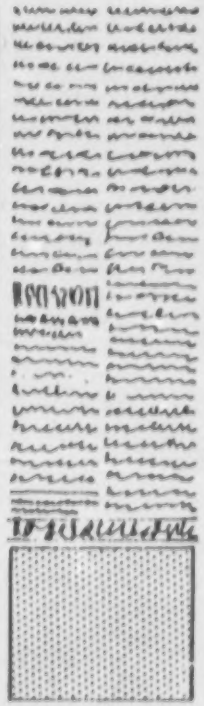
MidtownCourier ,196

Do you feel

Is your

Try

because



MidtownCourier ,196

WOMEN! Do you

then

MEN! Do you

then

Association With Affairs of Daily Living

LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Advertising Techniques	4.C.8	Two 45-minute periods

OBJECTIVE 4 - 2.2.1 Describe advertising techniques used to influence consumers to buy products and services.

INSTRUCTIONAL MATERIALS:

Poster Board
Construction Paper
Newspapers
Scissors
Glue
Manila Paper
Magazines

PROCEDURES:

Review with students the various techniques used in advertising. Divide class into groups of 4 to 5 students per group. Assign the following advertising techniques to groups. (1 to each group)

newspaper
magazines
television
radio
billboards

Read the following given situation to the students.

A national manufacturer is told that it takes about a $10 million advertising budget to popularize a new toothpaste. He knows that the high degree of brand loyalty will make it difficult to shift buying habits. He is now holding a staff meeting with his top employees and the advertising representatives who have been employed to promote the new product.

Remembering your own reaction to advertisements and promotional campaigns, help the national manufacturer plan his campaign by using the technique assigned to your group.

EVALUATION:

Have students give presentation of their advertising technique. After all presentations have been given, ask students which advertisements appealed to children? Young people? Older people?

OBJECTIVE 4 - 2.2.1

ENRICHMENT/REINFORCEMENT:

Have students volunteer to share their reactions to a favorite commercial on T.V. or radio. Have them give examples of commercials they especially dislike.

CONCEPT/SKILL Reading Labels	TEST IMS 4.C.8	ESTIMATED TIME 45 minutes

OBJECTIVE 4 - 2.2.2 Compare labels of major health products available to the consumer.

INSTRUCTIONAL MATERIALS:

Kit: National Dairy Council, Label It Nutrition.
Activity Sheet: "Label" (Master included, make a copy for each student.)
Labels from various products.

PROCEDURES:

Today more than ever before, consumers want the best buy for their money. The information found on food labels can help you make wise purchases when you use it to the best advantage.

Do any of you read labels when you go to the grocery store?
Have you ever stopped to think of all the information labels contain?

Explain to the students that labels are required to have the following four items listed on them: 1) identity of the product; 2) net content or net weight; 3) name and place of business of the manufacturer, packer, or distributor; 4) list of ingredients.

Labels may give other information such as a description of the product, information on storage and usage, recipes, and nutrition information.

Sometimes a "pull date" will be on a product. This tells you the date after which a product should not be sold.

Distribute Activity Sheet "Label" and ask students to look for a series of black and white bars. This is the Universal Product Code (UPC) and is used with the computerized checkout systems in some supermarkets. The code is passed over a scanner by a clerk and the computer gives the name and price of the item on the cash register.

Have students complete the activity sheet and then check the answers.

EVALUATION:

Have students divide a sheet of paper into two columns. In one column list which information on the label is required. In the other column list which information on the label is optional.

OBJECTIVE 4 - 2.2.2

ENRICHMENT/REINFORCEMENT:

Ask students to bring in labels from various products found at home. Have the students analyze the labels for information which would aide the consumer.

Objective 4 - 2.2.2

ACTIVITY SHEET "LABEL"

MRS. O'LEARY'S

small curd

COTTAGE CHEESE

4% MILKFAT MINIMUM

net wt. 16 oz. (1 lb.)

NUTRITION INFORMATION

(per serving)

Serving size = ½ cup

Servings per container = 4

CALORIES	120	CARBOHYDRATE	3 gm
PROTEIN	15 gm	FAT	5 gm

PERCENTAGE OF U.S. RECOMMENDED DAILY ALLOWANCES (U.S. RDA)

PROTEIN	30	NIACIN	0
VITAMIN A	4	CALCIUM	8
VITAMIN C	0	IRON	0
THIAMINE (B_1)	0	VITAMIN B_6	10
RIBOFLAVIN (B_2)	10	PHOSPHORUS	15

INGREDIENTS: CULTURED SKIM MILK, MILK CREAM, SALT, LOCUST BEAN GUM, GUAR GUM AND DEXTROSE

FRIENDLY DAIRY FOODS, INC. HOMETOWN, U.S.A. 87654

STORE IN REFRIGERATOR

COTTAGE CHEESE SALAD

Arrange lettuce on plate, top with cottage cheese, peach slices, pineapple, and fresh grapes.

12345 67890

1. What is the brand name? _____
2. What food is contained in the package? _____
3. What is the weight? _____
4. Is there a list of ingredients? _____
5. If "Yes" what are the ingredients? _____

   _____
6. Is there nutrition information? _____
7. If "Yes" what type of information is given? _____
8. Is there information on how to use the product? _____
9. Is there information on storage? _____
10. Do you think some of this information is required by law? _____
11. What is the name and place of business of the manufacturer? _____
12. Is there a Universal Product Code symbol? _____

LESSON PLANS

CONCEPT/SKILL Reading Labels	TEST IMS 4.C.9	ESTIMATED TIME 45 minutes

OBJECTIVE 4 - 2.2.2 Compare labels of major health products available to the consumer.

INSTRUCTIONAL MATERIALS:

3M Company, School Health Education Study, Concept 8, Level II-B
"Transparencies F, H, and I." (Masters included, make a copy for each student.)
Osceola County School District, Project SCAT.
Activity Sheet: "Read that Label" (Master included, make a copy for each student.)
Activity Sheet: "Care and Compare" (Master included, make a copy for each student.)

PROCEDURES:

Many health products are offered to the consumer in various ways. Much information can be learned about a product by simply reading the label.

Show transparencies and use suggested questions to stimulate discussion.

Transparency F
What is the ingredient doctors recommend the most in the bottles of painkiller?
How do you know what doctors recommend it?
How do you know doctors recommend this ingredient most?
According to the label, which one is stronger in this ingredient?

Transparency H
Why is it important we always read the label before taking any type of medication?
What type of information is found on this label?

Transparency I
Why is self-medication dangerous?
What promises are made about how you will feel on the front label that are different from the possible effects on the warning?

EVALUATION:

Distribute activity sheet "Read that Label" and have students fill in the blanks with information found on the labels.

OBJECTIVE 4 - 2.2.2

ENRICHMENT/REINFORCEMENT:

Have students visit a supermarket, discount retail store, or pharmacy and complete activity sheet "Care and Compare." Encourage students to choose examples of common medications such as acne preparations, cold medications, sleeping tablets, and pain killers, as well as the grooming products suggested on the activity sheet. Have them report their findings to the class.

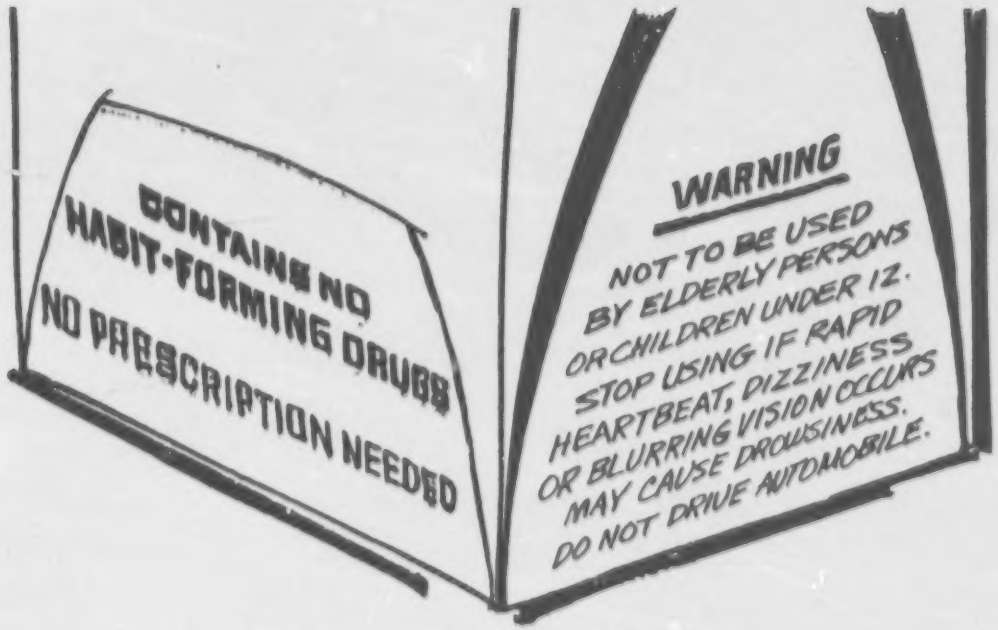
"Strongest in the ingredient doctors recommend most"

"Strongest in the ingredient doctors recommend most"

1. What is the ingredient doctors recommend most?
2. What doctors recommend it?
3. How do we know doctors recommend this ingredient most?
4. According to the label, which one is stronger?

Transparency H Objective 4 - 2.2.2

Read
the
Label



Self-Medication Is Dangerous

READ THAT LABEL!

BRAND NAME: _____

SIZE: _____

VOLUME (CONTENTS): _____

CLAIMS: _____

DIRECTIONS FOR USE: _____

SAFETY PRECAUTIONS: _____

ACTIVE INGREDIENTS: _____

NAME OF MANUFACTURER: _____

ADDRESS OF MANUFACTURER: _____

REGISTERED TRADEMARK SYMBOL: _____

COMPANY TRADEMARK: _____

UNIVERSAL PRODUCT CODE SYMBOL: _____

Flake-off
SHAKE WELL BEFORE USING. LATHER-RINSE-
REPEAT . . . USE AT LEAST TWICE A WEEK FOR
THE FIRST TWO WEEKS, THEN REGULARLY THEREAFTER.
CAUTIONS: Not to be taken internally. Keep out of
children's reach. Avoid getting shampoo in eyes--if
this happens, rinse eyes with water.
INGREDIENTS: Zinc pyrithione in a shampoo base of water,
sodium lauryl sulfate, cocamide dea,
triethanolamine, magnesium
aluminum silicate, hydro-
xypropyl methylcellulose,
fragrance, FD&C Green #3,
and D&C Green #5.
Made in U.S.A. by
Procter & Gamble
Cincinnati, Ohio 45203
0 70126

CARE AND COMPARE

Choose a type of personal grooming product in which you are interested. Use the form below to compare different brands of the product according to the categories listed on the form. Decide which is the best buy.

TYPE OF PRODUCT

_____

(DEODORANT, SHAMPOO, SOAP, ETC.)

PRODUCT INFORMATION	BRANDS COMPARED					
	BRAND NAME		BRAND NAME		BRAND NAME	
	SIZE A	SIZE B	SIZE A	SIZE B	SIZE A	SIZE B
SIZES AVAILABLE (BY WEIGHT OR VOLUME) IN EACH BRAND						
PRICE FOR EACH SIZE						
UNIT PRICE FOR EACH OUNCE, GRAM, ETC.						
TYPE OF PRODUCT (LIQUID, SPRAY, CREAM, ETC.)						
HOW PACKAGED (JAR, TUBE, CAN, ETC.)						
SPECIAL INGREDIENTS, IF ANY						
SPECIAL FUNCTIONS (AS DESCRIBED ON CONTAINER)						
CAUTIONS GIVEN						
DIRECTIONS FOR USE (RATE AS EXCELLENT, GOOD, FAIR, POOR)—REASON						
WHERE AVAILABLE (TYPE OF STORE: DRUG, SUPERMARKET, ETC.)						
OTHER (INFORMATION OR COMMENT)						

LESSON PLANS

CONCEPT/SKILL Reading Labels	TEST IMS 4.C.2, 4.C.8, 4.C.9	ESTIMATED TIME Three 45-minute periods

OBJECTIVE 4 - 2.2.2 Compare labels of major health products available to the consumer.

INSTRUCTIONAL MATERIALS:

U. S. Department of Agriculture, What's To Eat? and Other Questions Kids Ask About Food. (Washington, D. C.: Governmental Printing Office, 1979), p. 54-71.

Play: "The Adventures of Mr. Supermarket" (Master included, a copy should be provided for each student involved in the play.)

PROCEDURES:

This play will provide information concerning smart shopping in the supermarket. Several criteria for the proper selection of various food items are given. The play is divided into two acts with three scenes per act: There is also a brief intermission which involves two characters. (This concerns labeling.) In the two acts, two characters and an announcer are involved:

Characters

Announcer: Narrator of play.

Mr. Supermarket: He looks a lot like superman, but he's actually super only when it comes to knowing about supermarkets.

Larry: Age 12, a typical young shopper.

In the brief intermission, the announcer and sponsor are needed.

Assign various parts to students. In order to involve more students, at the end of each scene, have different students play the role of Mr. Supermarket and Larry. Only one announcer and sponsor should be used.

A copy of the play should be given to each student which has a part in the play. Allow time for students to read and rehearse parts. Discuss information on the first two introductory pages to the play before the play begins.

OBJECTIVE 4 - 2.2.2

EVALUATION:

Have students make a list of tips from the play for smart supermarket buying.

ENRICHMENT/REINFORCEMENT:

Have students name examples of places they get food from besides supermarkets. Ask them how often they get food from these places.

Ask students to name examples in the community of the following places to get food: schools, restaurants, farmers markets, roadside stands, food cooperatives, ma and pa groceries, chain convenience stores, health food stores.

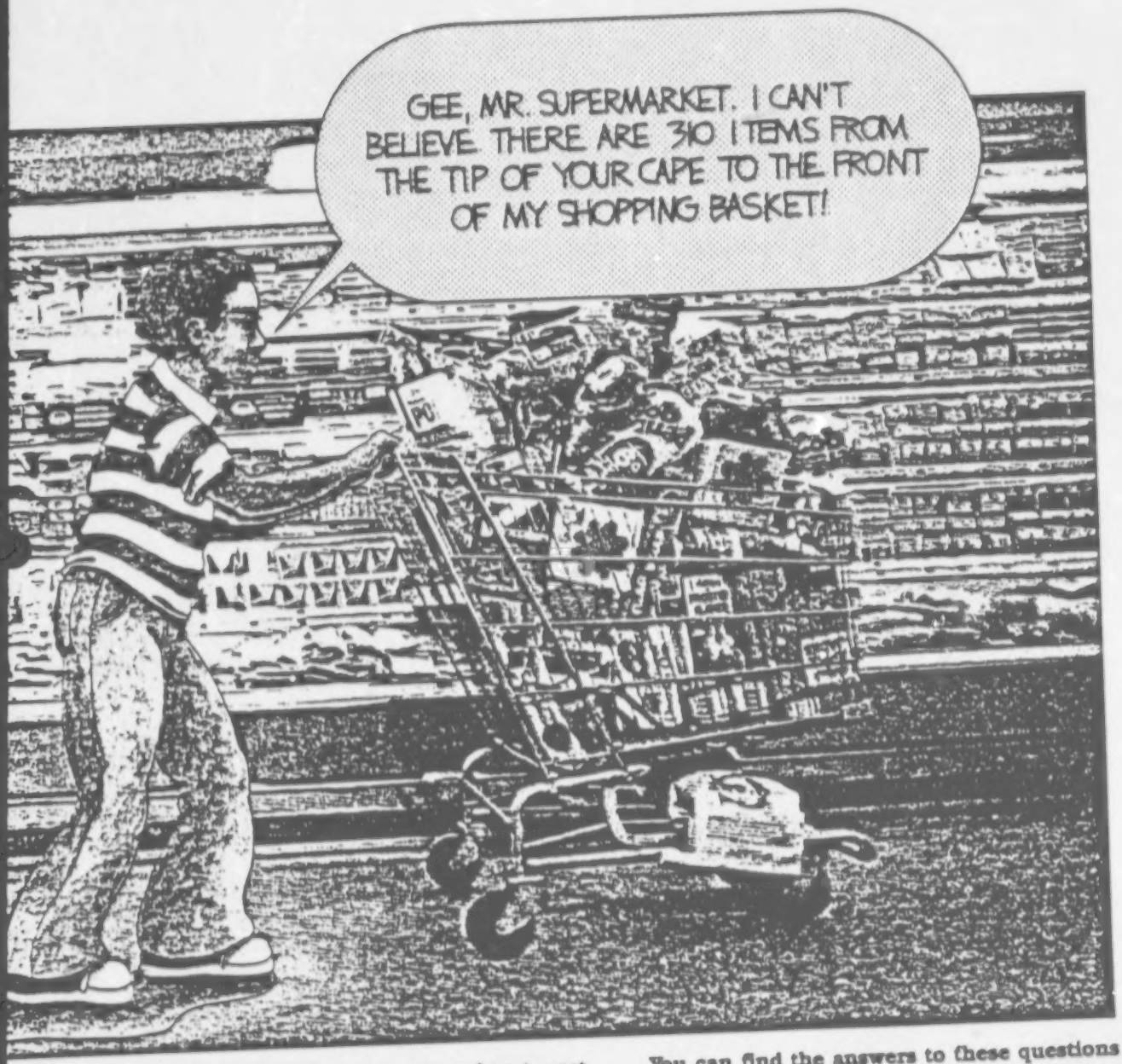
Have students bring in the "Food Section" to the newspaper, or any other grocery mail ad. Have them look for "loss leaders," "cents-off coupons," and special sale items. Analyze the ads and decide if going to a particular store is cheaper than another.

CAN SMART SHOPPING REALLY SAVE MY FAMILY MONEY?

A Tour of a Supermarket and Other Places We Get Food

A Play in Two Acts

Supermarkets. There are so many different things inside that if you stopped to look at each one for just 30 seconds, you wouldn't get out of the store until nearly 11 days later.



Supermarkets are where most people get most of their foods. And the more than 10,000 items in the big stores can seem pretty confusing.

How can you decide what to buy? Which foods are the best deals? Why is the supermarket laid out the way it is? Why are the fruits and vegetables usually in the corner? Why is the meat often in back?

You can find the answers to these questions and others in this play. It's called "The Adventures of Mr. Supermarket." →

The Adventures of Mr. Supermarket

Act 1: Scene 1: Vegetables

CAST OF CHARACTERS

Mr. Supermarket — He looks a lot like Superman, but he's actually super only when it comes to knowing about supermarkets.

Larry — age 12, a typical young shopper.

ACT ONE

Scene 1: *Larry is standing inside the supermarket looking around. He seems a little confused.*

Suddenly, from out of nowhere, Mr. Supermarket zooms in. He lands next to Larry.

Larry: Wow! It's Superman!

Mr. Supermarket: Rats! I just don't understand it. Everybody is always making the same mistake.

Larry: Huh? You mean you're not Superman?

Mr. Supermarket: No, my name is Mr. Supermarket. But some day I've just got to find out who this guy is who goes around looking like me all the time.

Larry: Mr. Supermarket? Gee, I don't think I've ever heard of you.

Mr. Supermarket: Well, you see, I know all there is to know about supermarkets. That's how I got my name. By the way, what's your name?

Larry: It's Larry.

Mr. Supermarket: Harry, huh? Well, let's see how I can help you with your shopping, Harry.

Larry: Thanks, but it's Larry.

Mr. Supermarket: Oh, well, grab a cart, Terry. Now what's the first thing you need?

Larry: Larry!!

Mr. Supermarket: Berries, huh? They're right this way. Just follow me.

Larry *(following Mr. Supermarket):* Oh, well.

Mr. Supermarket: Did you know that from the tip of my cape to the front of your basket there are as many as 310 different food items? Not only that, but the typical shopper makes one purchase about every 30 seconds while he is in the store. *(Mr. Supermarket races down the aisle. He's looking over his shoulder at Larry, so he doesn't see where he's going.)*

Larry: Watch out! You're heading right for the...

Mr. Supermarket *(crashing into a pile of oranges):* Rats! A little accident. Oh, well, it happens all the time. *(He picks up some oranges rolling on the floor, and puts them in a box for damaged fruit.)* That's why we put fruits and vegetables here in the corner.

Larry *(laughing):* So people can run into them?.

Mr. Supermarket: No, no! They're here because there's more room in the corner than in the aisles. So there's plenty of room for people who work here to come in and clean up these little messes without getting in the way of customers. Even when there are no spills, store clerks have to spend a lot of time in this section. They bring out fresh supplies and keep all these piles neat.

Larry: This sure is a colorful part of the store. All the greens and reds and yellows remind me of jelly beans. By the way, where would I find some....

Mr. Supermarket: Not so fast, Gary. I've got a question for you. Do you notice anything here that wasn't here a few months ago?

Larry *(looking around and thinking hard):* I've got it! Sure! Peaches and blueberries. We haven't had them all winter.

Mr. Supermarket: You keep your eyes open, don't you Perry?

(Larry starts to correct him, then just rolls his eyes and shrugs.)

Mr. Supermarket: Fruits and vegetables have growing seasons. We usually get only the delicate fruits when they're in season. But there are other foods that people just don't want to do without no matter what season it is. So, we ship those foods around the country all year long. See, something can be *in* season in the South, and out of season in the North. So the South can ship food up to the North. Or the West can ship to the East or the East to the West.

Larry: Doesn't the food cost more if you have to ship it a long distance?

Mr. Supermarket: Sure. Fruits and vegetables are cheapest when you buy them locally in season. They're highest priced in the off seasons, and when they first come into season. That's when everybody's real anxious to get them, but there isn't enough yet to go around.

Larry: How can you tell what fruit is in season when?

Mr. Supermarket *(throwing open his cape):* How can you tell what fruit is in season when? Simple. I just happen to have a chart here. Take a look.

Larry: Thanks.

Mr. Supermarket: Well, I've got to fly. Bye.

HOW CAN YOU TELL WHAT FRUIT IS IN SEASON? SIMPLE. I JUST HAPPEN TO HAVE A CHART IN MY CAPE!
Seasons For Fruit
(Usually cheapest and best in season)
Apples – fall and winter most plentiful
Bananas – all year good supplies
Blueberries – June-August
Cantaloupe – May-September
Cherries – May-August
Grapefruit – October-June
Grapes – June-December
Oranges – November-June
Strawberries – April-June

Larry: Hey, wait! We have the whole rest of the store to go through. Meats. Dairy food. Canned and frozen food. And I've got all sorts of questions.

Mr. Supermarket: And I'm just the man to give you the answers, Carry.

Larry: IT'S LARRY!

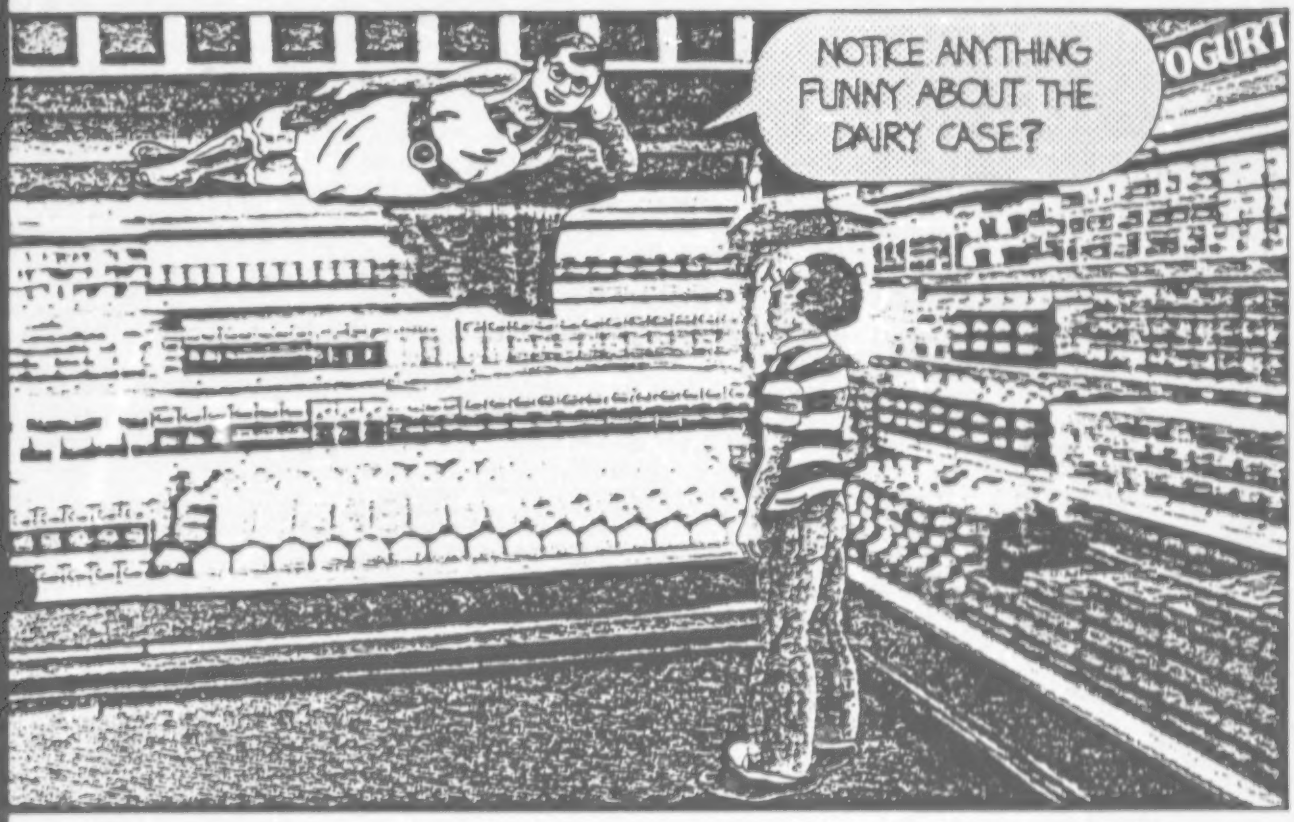
Mr. Supermarket *(looking around):* WHERE?

Larry: Right here!

Mr. Supermarket: Now listen, we don't have time for games. I'll meet you in the dairy section. →

Play Objective 4 - 2.2.2

Scene 2: The Dairy Section



Scene 2: *Dairy Section, moments later.*

Mr. Supermarket *(lounging on top of the dairy case):* Notice anything funny about this dairy case?

Larry: Yeah, you're sitting on top of it.

Mr. Supermarket: No, that's not what I mean. I mean do you notice anything funny about where the dairy case is?

Larry: It's on the side of the store.

Mr. Supermarket *(smiling; he thinks he's got Larry):* Yes, but why?

Larry: I bet it has something to do with refrigeration. All the refrigerated foods seem to be along the walls of the store.

Mr. Supermarket *(looking a bit disappointed):* Rats! I can usually stump a person with that question. Well, you're right. Supermarkets put most of the refrigeration units all along the walls. That's where you'll find meats, dairy foods, fruits and vegetables.

It makes it easier to keep shelves stocked up because there's usually a little more elbow room on these aisles around the outside of the store. And we don't have far to carry the food. Storage space is often just on the other side of the refrigeration units. *(His face brightens with the next question.)* But I bet this will stump you. Which size eggs are the best deal?

Larry: Grade B?

Mr. Supermarket *(jumping up and down with glee):* Aha! I STUMPED YOU! I STUMPED YOU! *(Realizing how foolish he must look):* Oh, excuse me. You see, grades have nothing to do with size. Grades deal with quality. Grade AA and Grade A mean

the eggs have a firm yolk. Grade B eggs, which aren't found in the retail stores very often, have a thinner yolk and more white. They're good for scrambling and baking.

But as for size—jumbo is the biggest. Then comes extra large, large, medium, small and finally peewee.

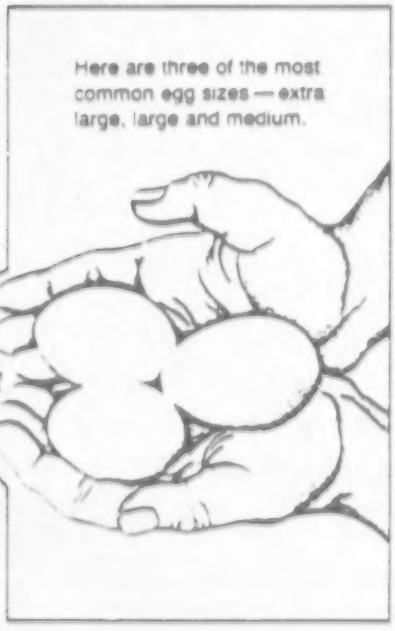
Larry: But what's the best deal?

Mr. Supermarket: Here's a tip. If the difference between any two sizes is more than 8 cents, usually the smaller eggs will be a better buy.

And that's the truth... egg-zactly.

Larry *(groaning):* Ugh, what a pun. I'll meet you at the meat counter, Mr. Supermarket.

Mr. Supermarket: To the meat counter! □



Here are three of the most common egg sizes—extra large, large and medium.

Scene 3: The Meat Counter

Scene 3: *(Larry is standing behind the meat counter, waiting for Mr. Supermarket)*

Larry: Beat you, Mr. Supermarket.

(Mr. Supermarket gives Larry a dirty look. Then they both start laughing.)

Larry: Look at all this meat!

Mr. Supermarket: You see this mark?

Larry: You mean: Choice?

Mr. Supermarket: Right. That's a grade of meat set by the Federal Government. And that's the grade you see most often in supermarkets.

Larry: But I've also heard of U.S. Prime meat.

Mr. Supermarket: U.S. Prime is the tenderest and juiciest meat of all. But you usually don't see that in the grocery store. It goes to good restaurants.

Larry: What's that other mark on the meat?

Mr. Supermarket: That's an inspection mark. It's inspected by the government to make sure it is clean and safe.

Larry: How do you read the price tag on all this meat? The tags have so many numbers, I can't tell which one is the price!

→

Mr. Supermarket: Allow me.

(He lifts up the package of eye round roast and holds it out.)

This means that this meat sells for $2.99 per pound. This one weighs 3.70 pounds. And the total price is $11.06. But there's one thing to remember! You don't judge a meat only on its cost per pound.

Larry: Sure, I know that. You have to think about taste, too.

Mr. Supermarket: Besides that, I mean. You have to think about how much the meat costs per serving, not just per pound. With meat that has lots of bones and fat, like T-bone steak, spareribs or rib roast, you might get only about two servings per pound.

But with meats that have little or no bones, like rump roast or boneless ham, you might get three servings per pound. Boneless beef might cost more per pound — but less per serving.

Larry: Gee, thanks for the tip. But now I have a question for you, Mr. Supermarket. Why's the meat counter all the way in the back of your store?

Mr. Supermarket: Well, one reason is so we can have the space to keep a butcher behind the meat counter to cut what you want. But even stores without a butcher need nearby space to prepare the meat and keep extra supplies in storage. The meat counter could be on any side. But if it's in back, it has the extra advantage of drawing customers all the way into the store. We want them to see all the wonderful things we have for sale.

Larry: And the more they look around, the more they might buy.

Mr. Supermarket: You catch on fast. Well, let's get going. Oop! The wheel on my shopping cart got stuck. Mr. Goldman wouldn't like that.

Larry: Who?

Mr. Supermarket: Sylvan N. Goldman — he's right there in your hands.

(Larry jumps back from his shopping cart.)

Mr. Supermarket: At least, his invention is. Goldman is the father of the shopping cart. Came up with the idea in 1936.

Larry: What did people do before that?

Mr. Supermarket: They carried things around in their own bags or their hands. That meant they couldn't buy very much at one time. But these modern carts can carry up to 1,000 pounds. That's half a ton.

Larry: Wow!

Mr. Supermarket: Well, now that I think about it, I'm actually getting a little tired. I think I'll just curl up in my cart for a little afternoon . . . z-z-z-z!

END ACT I

INTERMISSION

Announcer: Don't go away. We'll be right back with Act II of our exciting drama: *The Adventures of Mr. Supermarket.* But right now it's time for a short intermission. So sit back and relax, while we have a word from our sponsor.

Sponsor: When you enter a huge supermarket, do you sometimes feel alone, confused, even — SCARED! Well, don't be. Shopping can be made easy once you know how to read the labels on all the cans and packages in the store.

These labels are actually like little "shopper-helpers." Each one tells a story. And there's even more help for you on the shelves as well. So let's see how all this information can help you.

Let's start with the basics: The basic label. This label tells you a number of things. Here are four of them.

1. The name of the food.
2. How much the contents weigh.
3. How many things there are inside.
4. The name and address of the manufacturer, packer, or distributor.

And those things are certainly not too hard to understand, right? So let's go on.

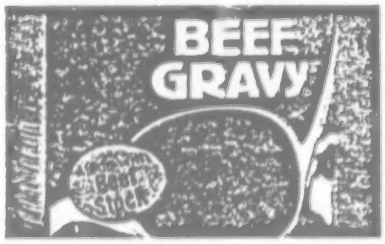
The ingredients on the package are also listed. The largest amount of an ingredient is listed first; the second largest second; and so on. If colorings or additives are used, these are listed, too. Usually, there is a brief explanation of what these additives do. For instance, you might find: "Added to maintain texture," or "Added to retard spoilage."

MADE WITH ENRICHED FLOUR (BARLEY MALT, FERROUS SULFATE (IRON), NIACIN (VITAMIN), THIAMINE MONONITRATE (B1), RIBOFLAVIN (B2)), BUTTER (MILK, WATER), DEXTROSE, YEAST, PARTIALLY HYDROGENATED LARD, SALT, CALCIUM SULFATE, SOY FLOUR, DOUGH CONDITIONERS (SODIUM STEAROYL-2-LACTYLATE, MONO- AND DIGLYCERIDES), MONOCALCIUM PHOSPHATE, DICALCIUM PHOSPHATE, POTASSIUM BROMATE, CALCIUM PROPIONATE (TO RETARD SPOILAGE).

All right. So far so good. But you might be asking yourself: What about those foods that don't list ingredients?

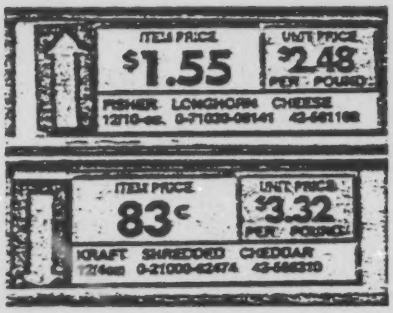
Well, it's true that there are some foods like that — more than 300 of them, in fact. But all of these foods must follow a general recipe. This is called "Standards of Identity." It's set up by the government.

For example, all peanut butter must be at least 90 percent peanuts. Spaghetti and meatballs must be at least 12 percent meat. "Beef with gravy" must be 50 percent beef. (But, listen to this: If the food says: "Gravy with Beef," then it has to have only 35 percent beef.)

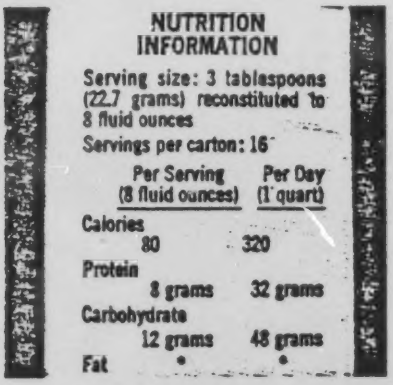


Now, as we said, the shelves themselves also provide some useful information. One bit of information is called "Unit Pricing." It shows not only how much the package costs, but also how much the item costs per unit. (A unit can be in ounces, pounds, or whatever is appropriate.) Many supermarkets put the unit price on the shelves just above or below the items. This is one of the most important labels. Since packages come in different →

sizes, you'll sometimes find it hard to compare prices. So the unit price labels do all the difficult math work for you. (As of 1979, 11 states required unit pricing by law.)



Nutrition Labeling is another important item on a label. Any food that makes a claim in advertising (or on the label) that it will do something special for your health must have a nutrition label. Other foods often have these labels just because the manufacturer feels customers will find them useful and interesting.



NUTRITION INFORMATION

Serving size: 3 tablespoons (22.7 grams) reconstituted to 8 fluid ounces

Servings per carton: 16

	Per Serving (8 fluid ounces)	Per Day (1 quart)
Calories	80	320
Protein	8 grams	32 grams
Carbohydrate	12 grams	48 grams
Fat	•	•

Now let's think about the dairy section for a minute. In that section, you're likely to find a fruit flavored yogurt, for instance. And on the container you might find this kind of information: (1) the contents provide one serving; (2) the serving has 250 calories; and (3) it has ¼ (25 percent) of the protein you need in a day, as well as some of the vitamins and minerals. Pretty useful "info," isn't it?

Did you ever notice dates and numbers on the top or bottom of a package in the dairy section? That date might look like this—"Apr 17"—or this—"0417"—or even this—"417." Or maybe it will just say "1979" or "79."

These dates help you to know when to use food while it's still freshest. And sometimes the dates will tell you when not to use the food. Let's take a closer look at three different dates you might find.

Pull Date: If the package is stamped with "Sell by Apr 17," that means that the manufacturer thinks it would be best if the retailer (your store manager) sold the food by that date. But it doesn't mean you can't use the food after that date.

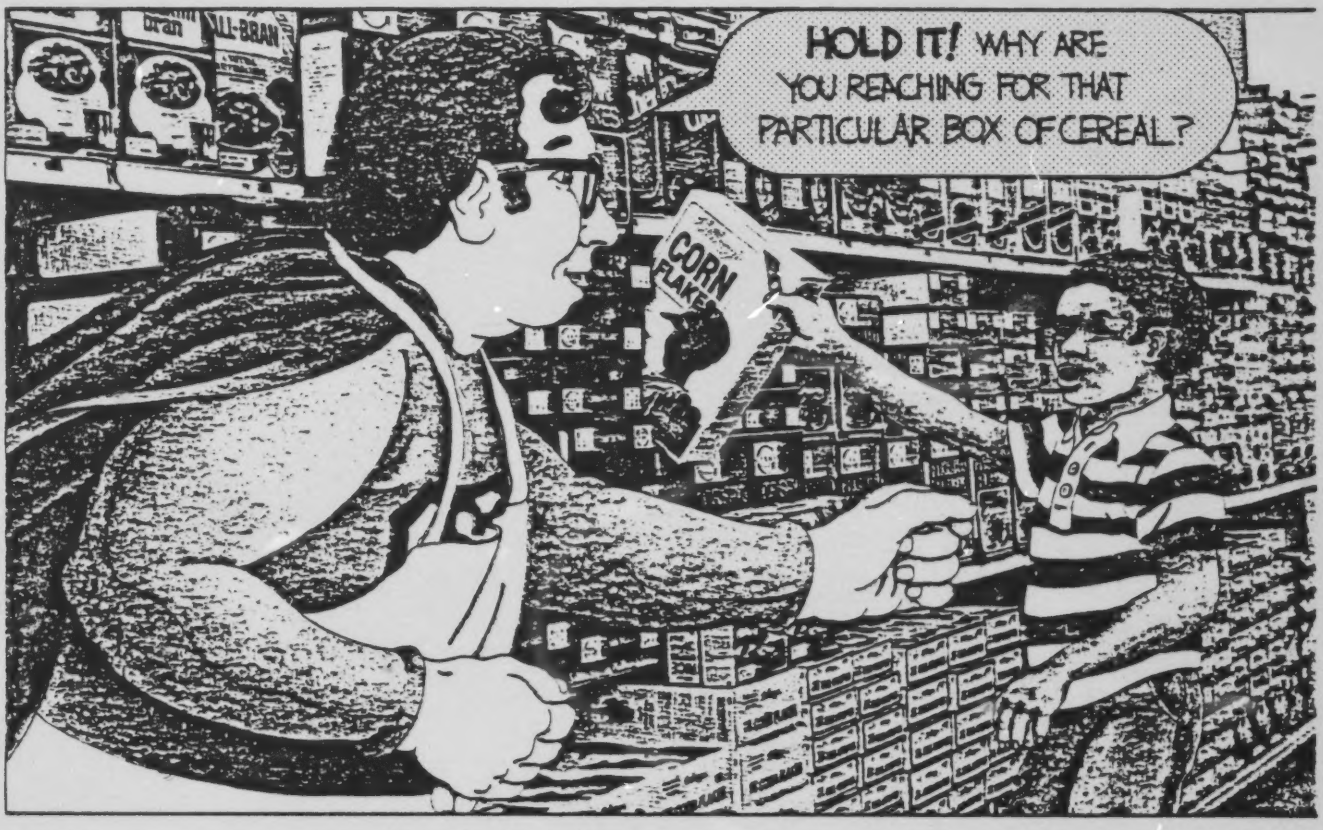
Freshness Date: Packages sometimes say: "Better if used by Apr 17." Or they might say: "Remains fresh at least one week after date stamped." Again, this doesn't mean you can't use the food after that date. But the product might not be at its best. It might not be as fresh.

Expiration Date: But if the package says: "Do not use after Apr 17" or "Exp Apr 17," that means DON'T USE IT AFTER THAT DATE. Except for eggs—they're different. This mark on an egg carton means the same thing as a freshness date.

So now you know just about everything there is to know about labels. And that should help make you a better shopper. Now back to our Announcer.

Announcer: When we left Mr. Supermarket at the end of Act I, he was curled up for a nice little nap. In the meantime, Larry has gone on with his shopping. So let's return to the exciting conclusion of our play: *The Adventures of Mr. Supermarket.* □

Act II: Scene I: Advertising



ACT II

Scene 1: The Supermarket. Larry is about to pick up a box of cereal from the shelf.

Mr. Supermarket *(with his cape flowing out behind him, races down the aisle of cookies, crackers, and cereal):* Hold it! Why are you reaching for that particular box of cereal?

Larry: I don't know. I guess because the picture on the box looks kind of neat. It just caught my eye.

Mr. Supermarket: Of course it looks "neat." Manufacturers spend a lot of money to come up with jazzy packaging that will catch your eye as you speed down the aisles. Why, more than 10 percent of the money you spend on food goes for the package. The package probably also caught your eye because it was on the middle shelf—just at eye level. Many stores put the most popular items at eye level so you can see them right away. And if there's something new we especially want people to try, we also put it where they can see it—and reach for it most easily. But you ought to have a better reason for buying something.

Larry: Well, I know the name. I've seen it advertised on TV.

Mr. Supermarket: Sure. National brand names are advertised. But the advertising is expensive and you pay for the ads in the cost of the product. If the product's good enough, maybe you don't mind. But have you ever looked at store brands?

Larry: Store brands? What are those? →

Play Objective 4 - 2.2.2

Scene 2: The Frozen Food Section

Mr. Supermarket: Take a look at these labels. Many large supermarket chain groceries sell products almost identical to big national name brands. They can often charge less for them. Sometimes stores even buy the item from the national company — so it's exactly the same — only with the store's label instead. Sometimes store brands aren't any cheaper, though. So you have to check the unit pricing to tell.

Larry: What about that real plain can? It doesn't even have the store's name.

Mr. Supermarket: This is something new that some stores are using. It's called "generic labeling." There are no fancy packages. Just the food. And it's usually cheapest of all. The quality of the food may not be as high, but it is generally as good nutritionally as the national or store brand.

Larry: How can I tell which to buy?

Mr. Supermarket: You'll just have to try them and see which you like best. If you can't taste any difference between this name brand and the store brand, and there is no real nutritional difference, then you should pick whichever costs less. You're here to buy food, not a name, right, Harry?

Larry: Sure. What's in a name, anyway? Right, Mr. Fishmarket?

Mr. Supermarket: Fishmarket? It's Mr. Supermarket.

Larry: Where?

Mr. Supermarket: Right here.

Larry: Well, I don't see your friend Mr. Supermarket. And I haven't got all day. Let's move on to the frozen foods.

Three cans of corn — a store brand, a national brand and a generic label.

Scene 2: *Larry and Mr. Supermarket are now in the frozen food aisle.*

Larry: Sure has taken us a long time to get here.

Mr. Supermarket: That's because we're at the end of the line. Frozen food should always be your last stop. And you should go straight home after shopping so the food doesn't thaw. But if you go out and run other errands and the food does thaw, you shouldn't refreeze it. Some foods could spoil, and others will lose their flavor and texture in the refreezing.

Larry: This is the best place to stand on a hot day. How cold is it in the frozen food case, Mr. Supermarket?

Mr. Supermarket: We keep the case anywhere from 0 to 10 degrees F.

Larry *(reaching for a package of frozen food):* This one's all frosted up with ice. I guess that means it's good and cold.

Mr. Supermarket: Not really. In fact, you probably shouldn't buy that one. That frost means it may have thawed a little at one point, or somehow moisture es-

caped from the package. Pick another one and let's go.

Larry: But wait. How do I know if it's cheaper to buy frozen or fresh or canned foods?

Mr. Supermarket: That's a tough question. There's no *one* rule. You have to compare. Sometimes frozen foods are cheaper. Frozen orange juice, for instance, is usually cheaper than fresh-squeezed. And when a vegetable isn't in season, often the frozen version is cheaper. Sometimes it's the only kind available.

Larry: Well what about frozen dinners?

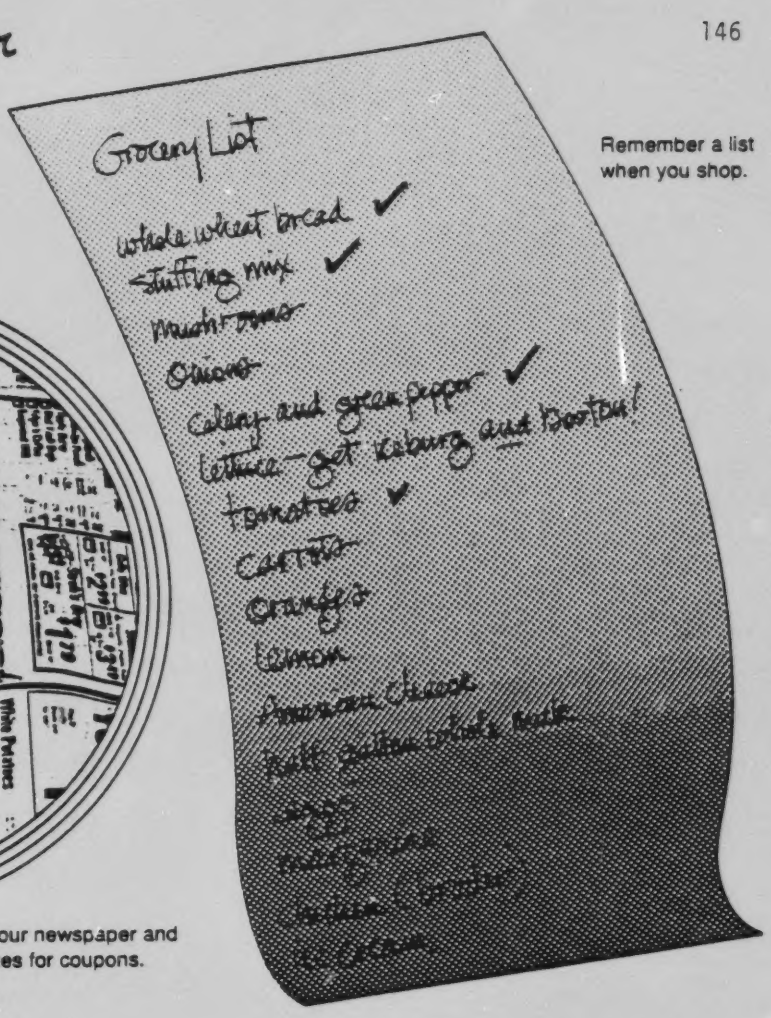
Mr. Supermarket: Frozen dinners are often more expensive than homemade versions of the same dinner. Here's a price comparison a government study made in Washington with 1978-1979 prices:

	Cents per serving
PIZZA	
Frozen	86
Homemade	48
CHICKEN CHOW MEIN	
Frozen	83
Homemade	53
FRIED CHICKEN	
Frozen	80
Homemade	38

Mr. Supermarket: So the thing to remember is to compare. And remember, you pay for convenience in ready-made foods. These are foods that you must heat up in the oven, or just add water to. Sometimes, though, they can be made from scratch almost as easily. And making it from scratch is often cheaper. Now, let's move on to the checkout counter. →

Scene 3: The Check Out Counter

Check your newspaper and magazines for coupons.



Remember a list when you shop.

Scene 3: *They're at the check-out counter.*

Mr. Supermarket: Where are your coupons?

Larry: What coupons?

Mr. Supermarket: Do you mean to tell me you came in here without checking your paper for coupons or sales?

Larry: It's not a holiday. I didn't think there'd be a sale.

Mr. Supermarket: Every week's a holiday in the supermarket biz. Every week we put something on sale. At most supermarkets you get the sales and the lowest prices at the end of the week, Thursday through Saturday, and in some places even Sunday. Sometimes we even sell certain items for little or no profit or at a loss. Those items are called "loss leaders."

Larry: Why would you do that?

Mr. Supermarket: Well, people read our advertised special price and they come into the store to buy. Once they're in...

Larry *(interrupts with the answer):* Then they do the rest of their shopping there.

Mr. Supermarket: Clever lad. And we hope they'll come back again, too.

Larry: But the cents-off coupons are different. I can use them in any store, right?

Mr. Supermarket: Yes. Those are put out by the manufacturers of the products. They run billions of those coupons in local papers and magazines everywhere. It's their way to encourage people to try one of their new products or to switch brands.

Larry: Do I have to buy the product—or can I just bring in the coupon and get money?

Mr. Supermarket: No, you have to buy the item. That's the whole point. Then the supermarket sends the coupon in to the manufacturer and the manufacturer sends the store the money that was discounted. See?

Larry: Yes. But it's hard to concentrate on what you're saying with all this yummy-looking candy around. I think I'll take one of these, and one of...

Mr. Supermarket: H-m-m-m. Were those on your list?

Larry: What list?

Mr. Supermarket: You mean you came in without a grocery list! That can be risky. You could wind up buying on impulse lots more than you need.

Larry: I can't help it. These things look so good. And after all this shopping, I'm HUNGRY.

Mr. Supermarket: Shopping when you're hungry is even riskier than shopping without a list. One supermarket study showed that people often spend 15 percent more if they shop when they're hungry.

The scanner, that's the computer's glass eye, sees the UPC Code and searches its memory to find the price.

Larry: What's that beeping noise?

Mr. Supermarket: Oh, that? Just our little computer.

Larry: What does it do?

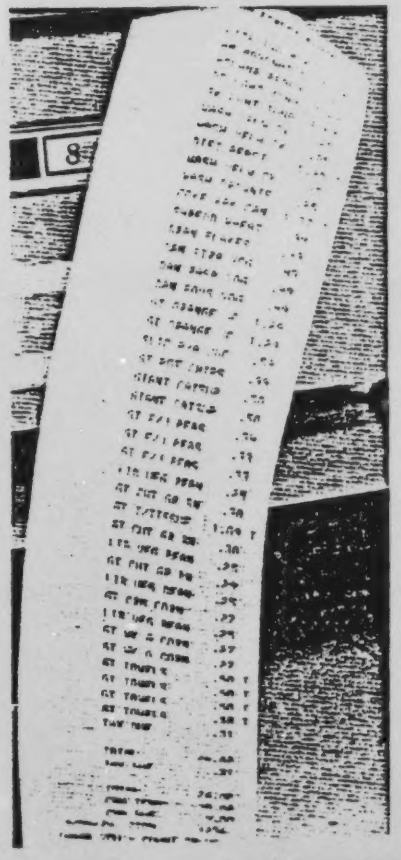
Mr. Supermarket: Well, many of the modern stores have them. You see those vertical black bars on the sides of those grocery packages?

Larry: Yeah, is that a secret code?

Mr. Supermarket: Sure, but the computer understands it. It's called the Universal Product Code (UPC). The first five digits identify the manufacturer; the second five digits identify the product size and flavor. The computer reads the black bars instead of the numbers. Here! I just happen to have a sample of a UPC.

The Universal Product Code. Look for it on what you buy.

The cashier pulls the UPC mark over that glass. It's the computer's glass eye. We call it the scanner. And when the computer's laser beam sees the code, it searches its memory to find the price. If it understands, it beeps. Then it prints up the item and the price on the receipt tape.



Check each item on your receipt tape.

Larry: It does all that in just the time it takes to flash the code across that screen?

Mr. Supermarket: Yep, as fast as the blinking of an eye — the computer's glass eye. And now we're done.

Larry: Thanks for the tour, Mr. Supermarket.

Mr. Supermarket: My pleasure, Harry.

Larry: IT'S LARRY!

Mr. Supermarket *(looking around):* Where IS this friend you keep talking about, Gary?

Larry: He's not a friend...

Mr. Supermarket: Well, then I can't see why you keep bringing him up. Kids. *(And with that Mr. Supermarket zooms off calling...* Good-bye, it's been nice shopping with you! ❑

LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Selection of Health Products/Services	4.C.5, 4.C.14	45 minutes

OBJECTIVE 4 - 2.2.3 Identify the criteria for the proper selection of health products and services.

INSTRUCTIONAL MATERIALS:

3M Company, School Health Education Study, Concept 8, Level IV-C, "Transparencies A, C, F, G, and J. (masters included)
Florida Dental Health Education Curriculum.
Activity Sheet: "Should We Glisten?" (Master included, make a copy for each student)
Osceola County School District, Project SCAT,
Activity Sheet: " A Home Survey" (Master included, make a copy for each student)

PROCEDURES:

This lesson focuses on the application of sound criteria in both selecting and using health products and services. Explain to the students that sound criteria is the basis for making a good decision.

Show transparencies and use suggested questions to stimulate discussion.

Transparency A
Are the criteria shown in this picture sound reasons for selecting health products and services?

Transparency C
Would the criteria in this picture help you in making a wise decision?

Transparency F
Is advertising helpful in obtaining sound information in order to make good health choices?
In what ways should advertising be considered in decision making?

Transparency G
Are the reasons the girl in the picture chose this particular health product sound?
What are some other criteria she could have used in choosing this product?

Transparency J
Is the girl on the television picture using a sound way to lose weight?
What criteria should she use?

OBJECTIVE 4 - 2.2.3

EVALUATION:

Distribute activity sheet "Should We Glisten." Have students read cartoon and decide which product they would buy based on criteria given. Then, have them fill in the last cartoon with the girl's expressions and comments. Have students list the criteria they would use when buying a product.

ENRICHMENT/REINFORCEMENT:

Have students look for examples of advertisements of any kind that use the following propaganda techniques. Report their findings to the class.

a. Band wagon: Everybody's in favor of it: join the crowd.

b. Plain folks: The users of this product are simple, down-to-earth people like you and me.

c. Card stacking: Distorting or omitting facts, telling half-truths.

d. Name-calling: Stereotyping ideas or people with a bad label.

e. Glittering generalities: Using "good" labels, such as democratic, patriotic, amazing, beautiful, and exciting, that are unsupported by facts.

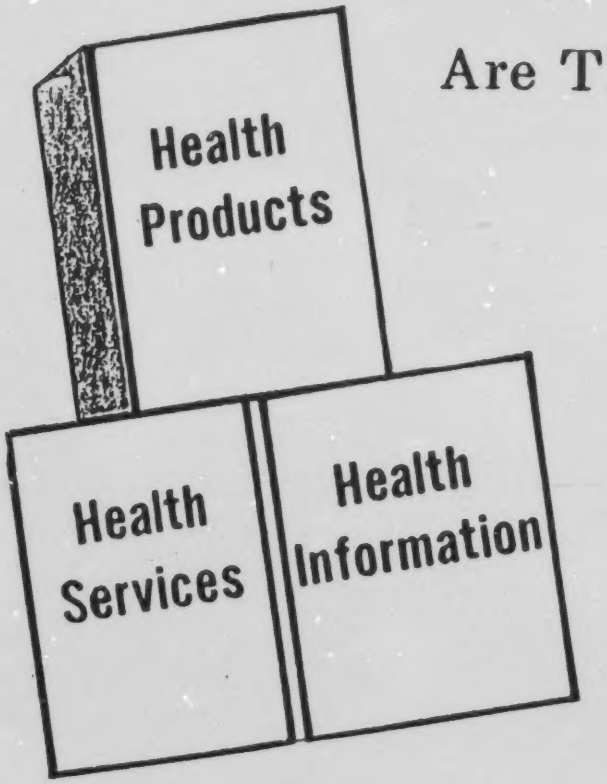
f. Testimonial: Seeking support for an idea or product by having it endorsed by a famous person, such as a sports figure and movie or TV star.

g. Snob appeal: Only the richest, most important, or most discerning people like this idea or product.

h. Transfer: Associating a respected person or idea with whatever is being promoted, such as picturing a well-known athlete in a breakfast cereal advertisement.

Have students complete activity sheet "A Home Survey." Students may ask another member of the family question four if they do not select any of their own products. Discuss results of survey in class.

Are These Criteria Sufficient?



"All my my friends say..."

"I hear one is as good as another"

"I've seen ads for..."

"It costs less..."

"What I want is a simple answer..."

"Recommended by my physician or dentist?"

"Medical Profession's Recommendation?"

"What Has Been Printed?"

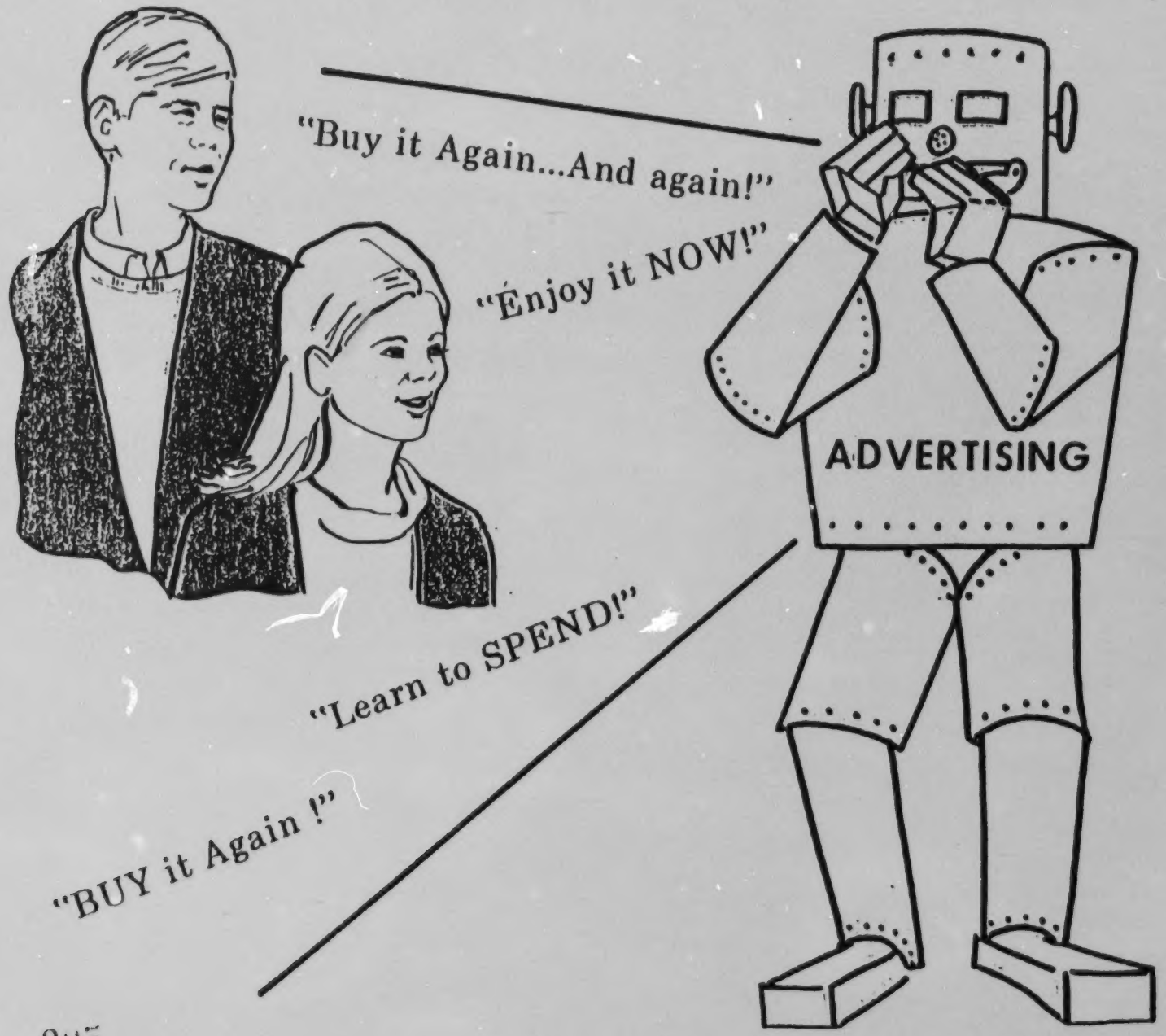
"In what journals?"

"Is my condition the same as...Jack's?"

"Governmental Agency's OK?"

"Side Effects?"

A Wise Decision Requires Sounder Criteria


"Buy it Again...And again!"
"Enjoy it NOW!"
"Learn to SPEND!"
"BUY it Again !"
ADVERTISING

"I bought it because...

my physician
recommended it."

FDA has judged it safe."

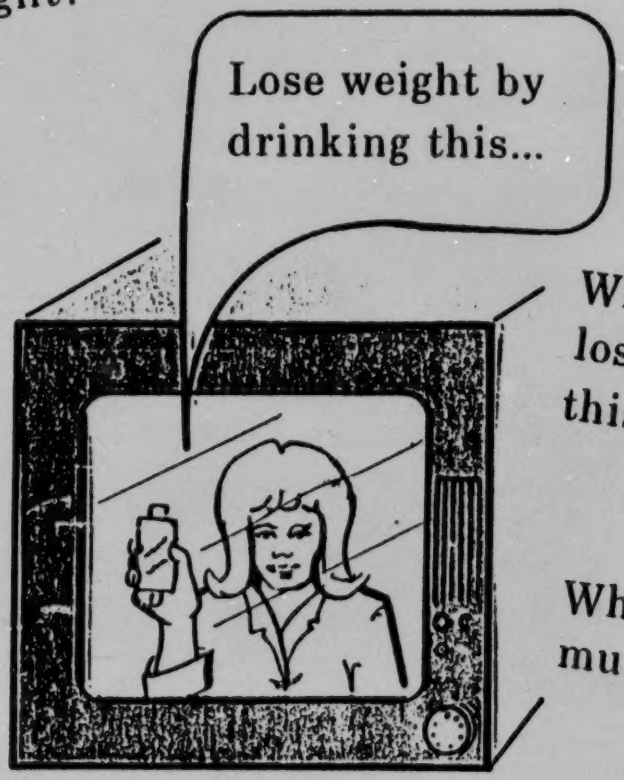
I used it before -
was satisfied."

Do I need to lose weight?

How much should I try to lose?

Is the product too expensive for its contents?

What nutrients does it provide?



What principle for losing weight does this product employ?

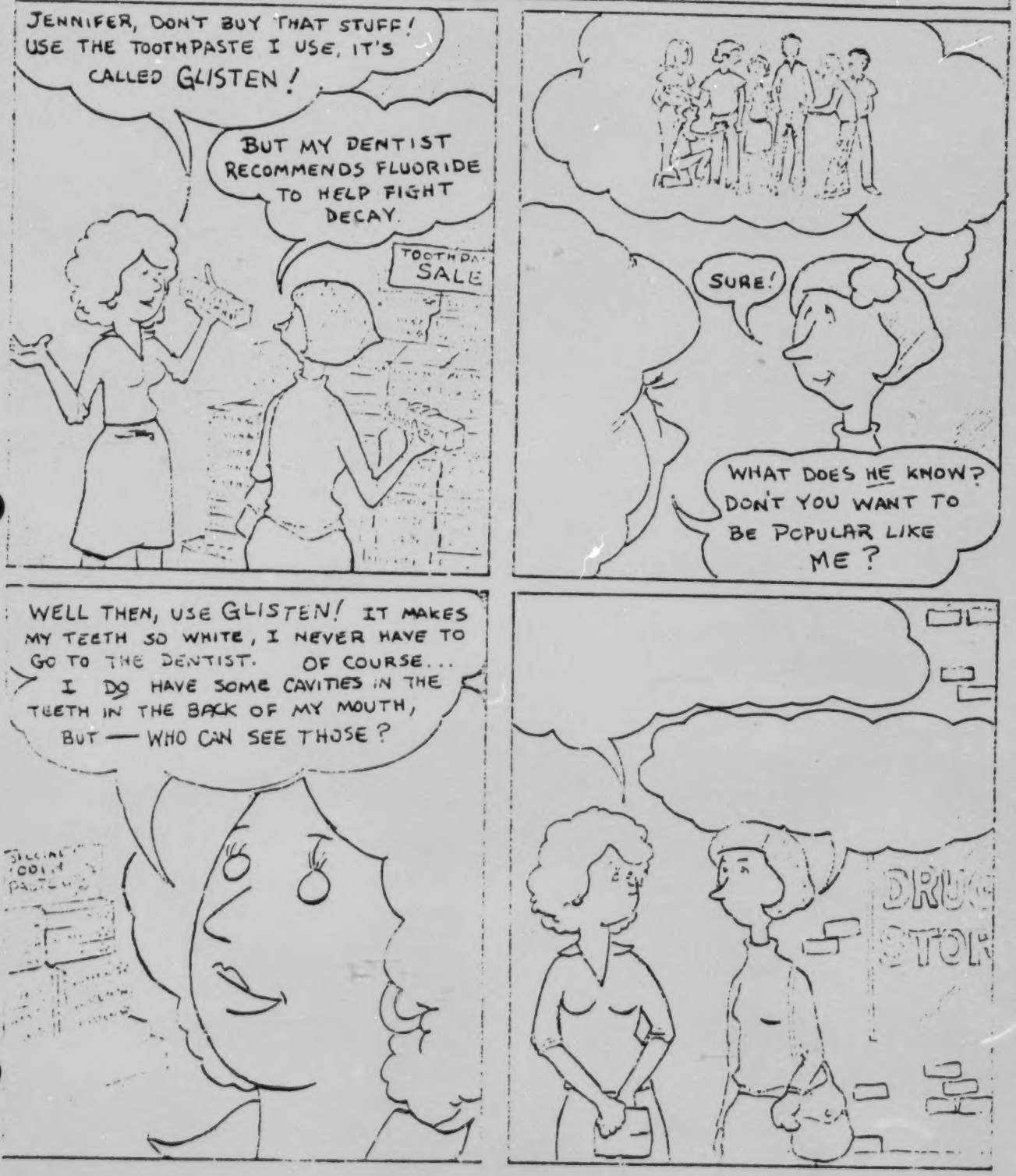
What other things must I do or not do?

What other nutrients do I need?

Is This A Sound Way to Lose Weight?

SHOULD WE GLISTEN??

IF YOU WERE JENNIFER, WHICH TOOTHPASTE WOULD YOU BUY? MAKE YOUR DECISION, THEN FILL IN THE LAST CARTOON WITH THE GIRLS' EXPRESSIONS & COMMENTS.


JENNIFER, DON'T BUY THAT STUFF! USE THE TOOTHPASTE I USE, IT'S CALLED GLISTEN!
BUT MY DENTIST RECOMMENDS FLUORIDE TO HELP FIGHT DECAY.
TOOTHPA
SALE
SURE!
WHAT DOES HE KNOW? DON'T YOU WANT TO BE POPULAR LIKE ME?
WELL THEN, USE GLISTEN! IT MAKES MY TEETH SO WHITE, I NEVER HAVE TO GO TO THE DENTIST. OF COURSE... I DO HAVE SOME CAVITIES IN THE TEETH IN THE BACK OF MY MOUTH, BUT — WHO CAN SEE THOSE?
DRUG
STOR

A HOME SURVEY

Personal care products, or toiletries, are familiar items in every household. These are such items as toothpaste, shampoo, shaving cream, after-shave lotion, hair tonic, hand lotion, soap, make-up, perfume, deodorant, etc. Completing this inventory should give you an insight into the ways you and your family buy and use such products.

1 SURVEY ALL THE TOILETRIES IN YOUR HOME. LIST BELOW, BY BRAND NAME AND TYPE (SPRAY, CREAM, LIQUID, POWDER, FOAM, ETC.), ALL THE DIFFERENT PRODUCTS THAT ARE USED BY VARIOUS MEMBERS OF YOUR FAMILY.

MAKE-UP PRODUCTS	MOUTH/TEETH-CARE PRODUCTS	OTHER PRODUCTS
_____	_____	_____
_____	_____	_____
DEODORANTS	HAIR-CARE PRODUCTS	_____
_____	_____	_____
_____	_____	_____
PERFUMES	SHAVING PRODUCTS	_____
_____	_____	_____
_____	_____	_____

ANSWERS WILL VARY

2 ARE ANY PRODUCTS USED BY EVERY MEMBER OF YOUR FAMILY? _____
IF SO, WHICH ONES? _____
WHO SELECTS AND BUYS THESE PRODUCTS? _____

3 DO YOU BUY YOUR OWN TOILETRIES? _____
IF SO, WHICH ONES? _____
WHERE DO YOU USUALLY BUY THEM? ( ) DRUG STORE ( ) SUPERMARKET
( ) DEPARTMENT STORE ( ) OTHER _____

4 WHY DO YOU SELECT A PARTICULAR BRAND OR KIND OF TOILETRY PRODUCT?
( ) LIKE THEIR ADS OR COMMERCIALS
( ) PARENTS' ADVICE OR SUGGESTION
( ) LIKE THE COMPANY'S OTHER PRODUCTS
( ) HAVE ALWAYS USED IT
( ) FRIENDS USE IT
( ) ON IMPULSE
( ) ATTRACTED BY THE PACKAGING
( ) COST FACTOR

5 WHAT DOES THIS TELL YOU ABOUT YOUR CONSUMER SKILLS IN THE PURCHASE AND USE OF PERSONAL CARE PRODUCTS?

Student Activity Sheet #7
Personal Grooming

LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Selection of Health Products/Services	4.C.5, 4.C.14	45 minutes

OBJECTIVE 4 - 2.2.3 Identify the criteria for the proper selection of health products and services.

INSTRUCTIONAL MATERIALS:

3M Company, School Health Education Study, Concept 8, Level IV-C, "Transparency H."
Osceola County School District, Project SCAT, Transparencies: "How to Choose A Doctor," "How Not to Choose A Doctor" and "How to Spot A Quack."

PROCEDURE:

Show transparencies and use suggested questions to stimulate discussion.

Transparency H
What are the criteria the girl in this picture used to select a doctor? Are they sound criteria?

Transparency "How Not To Choose A Doctor"
Why are these unsound reasons for choosing a doctor?

Transparency "How To Choose A Doctor"
Why would you use this criteria for choosing a doctor?

Transparency "How To Spot A Quack"
How would you recognize a "quack"?

EVALUATION:

Have students give a criteria for recognizing the following doctors as quacks.

1. A doctor says: "Any one of my patients will be happy to explain how I've cured them when no other doctor could. If you wish, I can show you what hundreds of patients have written praising my methods."

2. A doctor says: "My Marveltone machine reads body electricity and cures any disease by restoring the balance between positive and negative electric charges in the body. Cancer, heart trouble, TB, epilepsy, and diabetes are just a few of the diseases this machine has cured."

OBJECTIVE 4 - 2.2.3

3. A doctor says: "The American Medical Association doctors are jealous because none of them discovered the healing powers of this treatment. They know that these injections are a major breakthrough in treating disease, but they're afraid my methods will prove they're all crooks."

4. A doctor says: "I'm going to try a shot of penicillin, Mr. Smith. This ought to clear up your infection in a day or two. Call me the day after tomorrow if you aren't better by then." This doctor sounds like:

ENRICHMENT/REINFORCEMENT:

Have students present "a medicine show" in which several play the following roles: a witch doctor with a mythical cure, a traveling salesman with a cure-all tonic, a quack with a machine to cure rheumatism. Other students could give testimonials on miracle cures from doctors, special treatments, or products. Have other so-called experts who run clinics and health farms give their advertising spiels.

"I decided to go to him because he...

is active in the Medical Society."

---

was recommended by a responsible friend."

---

treats conditions with symptoms like mine."

HOW NOT TO CHOOSE A DOCTOR

Don't wait until you are sick.

Do not rely only on the advice of friends.

Don't head for a specialist first.

Avoid doctors with staff privileges only at small, private hospitals.

Do not choose a doctor just because he's famous.

Don't find your doctor in the yellow pages.

HOW TO CHOOSE A DOCTOR

Call a medical school or hospital.

Ask "nitty-gritty" questions first.

Check doctors' credentials.

Consider a group practice.

Find out a doctor's hospital privileges.

Check with local public interest groups.

Transparency Master #1
Health Care

How to spot a quack

SELF-STYLED MEDICAL EXPERTS AND QUACKS MAY:

1. "Guarantee" a quick "cure."
2. Use a "special" or "secret" machine, drug, or formula.
3. Sell the "cure" through the mail or door-to-door.
4. Use case histories and testimonials to promote the cure.
5. Tell you that X-rays and surgery do more harm than good.
6. Ask you to sign a contract.
7. Claim persecution by organized medicine.
8. Seek publicity and recognition for "cures."
9. Not have medical degrees or licenses to practice in your state.

Transparency Master #5
Medical Care

GRADE LEVEL: Fourth

THEME: Physical, Mental, and Social Health

PRIMARY IDEA: 2.0 Development in individuals may be altered by factors in the environment.	
SECONDARY IDEAS	OBJECTIVES
2.3 The use of mood modifiers affects body functions.	To demonstrate knowledge of dangers of various mood modifiers, students will do the following: 4 - 2.3.1 identify and categorize the range of mood modifiers from mild to strong; 4 - 2.3.2 describe how mood modifiers affect the proper functioning of the body; and 4 - 2.3.3 identify steps in making responsible decisions concerning use/nonuse of mood modifiers.

LESSON PLANS

CONCEPT/SKILL Range of Mood Modifiers	TEST IMS 4.V.1, 4.C.1, 4.C.8	ESTIMATED TIME Two 45-minute periods

OBJECTIVE 4 - 2.3.1 Identify and categorize the range of mood modifiers from mild to strong.

INSTRUCTIONAL MATERIALS:

3M Company, School Health Education Study, Concept 9-A, Level II, "Transparencies A, B, D, E, F, G, H, J, K, L, N, O, Q, and R." (Masters included, colored set available in your media center. Teachers guide in this set will be very beneficial to facilitate discussion.)
Crayons
Poster board

PROCEDURES:

TEACHER INFORMATION: These transparencies deal with naming, identifying, developing awareness, and realizing differences in family practices and feelings in relation to mood modifiers. Even though the focus of this learning is the range of substances, the concept to which all of these learnings lead emphasizes attention to the motivations of human beings - the range of reasons why people use, do not use, or misuse such substances.

Let's look at these transparencies and find out some more information about mood modifiers and how different types affect us in different ways.

Show the transparencies and use the suggested questions to stimulate discussion.

Transparency A
TEACHER INFORMATION: This study begins with a human example - a boy who sits on a bench alone and daydreams of himself in a comfortable easy relationship with a girl, as being successful in athletics, and as being recognized positively by adults. This does not imply that the boy is sick or necessarily neurotic.
Why is this boy thinking these thoughts about himself?
Do you ever wish that things were different than they are? Why?

Transparency B
TEACHER INFORMATION: As a young person becomes aware that certain "substances" are part of the world in which he lives, he may well have feelings of curiosity about these substances - what they are like, how they taste, and what their effects might be on him.
What is this boy thinking about?
Why is he curious about these substances?

OBJECTIVE 4 - 2.3.1

Transparency D
Why is the boy drinking rather than playing?
Why can these drinks be called "substances that modify mood and behavior?

Transparency E
Why might a man drink coffee or tea in a situation like this?
In what other situations might a person drink coffee and tea?

Transparency F
Why are some people smoking?
Why are others not?
What types of smokers are shown in this picture?

Transparency G
Beer and wine are associated with what activities in this picture?

Transparency H
Why would these people be drinking alcoholic beverages?
If the beverages are the same, why is the man outside acting in a different way than those inside?

Transparency J
What difference is portrayed in the top and bottom pictures?

Transparency K
What changes in feelings can aspirin bring about?

Transparency L
What is a barbiturate?
What is an amphetamine?
What kind of a change did the woman in the left picture want?
How can a pill help the woman in the right picture achieve the change she wants? Can this method of losing weight be dangerous? What is the best way to lose weight?

Transparency N
What is the boy in the picture doing?
Why would a person want to sniff glue?

Transparency O
TEACHER INFORMATION: The strongest, most powerful, addiction producing drugs used in this country are derivatives of opium, mainly heroin and morphine. When injected by needle into the bloodstream a narcotic drug may produce a dreamy, sedated feeling. However, the body adapts to it, and being without it may produce the agony pictures at the right.
Why do people do what is pictured at the left if the result is that pictured at the right?

OBJECTIVE 4 - 2.3.1

Transparency Q
TEACHER INFORMATION: Here is the unbalanced seesaw indicating the position of some substances on the continuum from mild to strong. The teacher may add others as seems appropriate.
What does "mild to strong" mean in this picture?
Which is shown as the mildest?
Which is shown as the strongest?
Where would you put tobacco? (Have students think about the number of diseases related to the use of tobacco.)

Transparency R
How do you suppose personality is a factor in mild to strong designations?

EVALUATION:

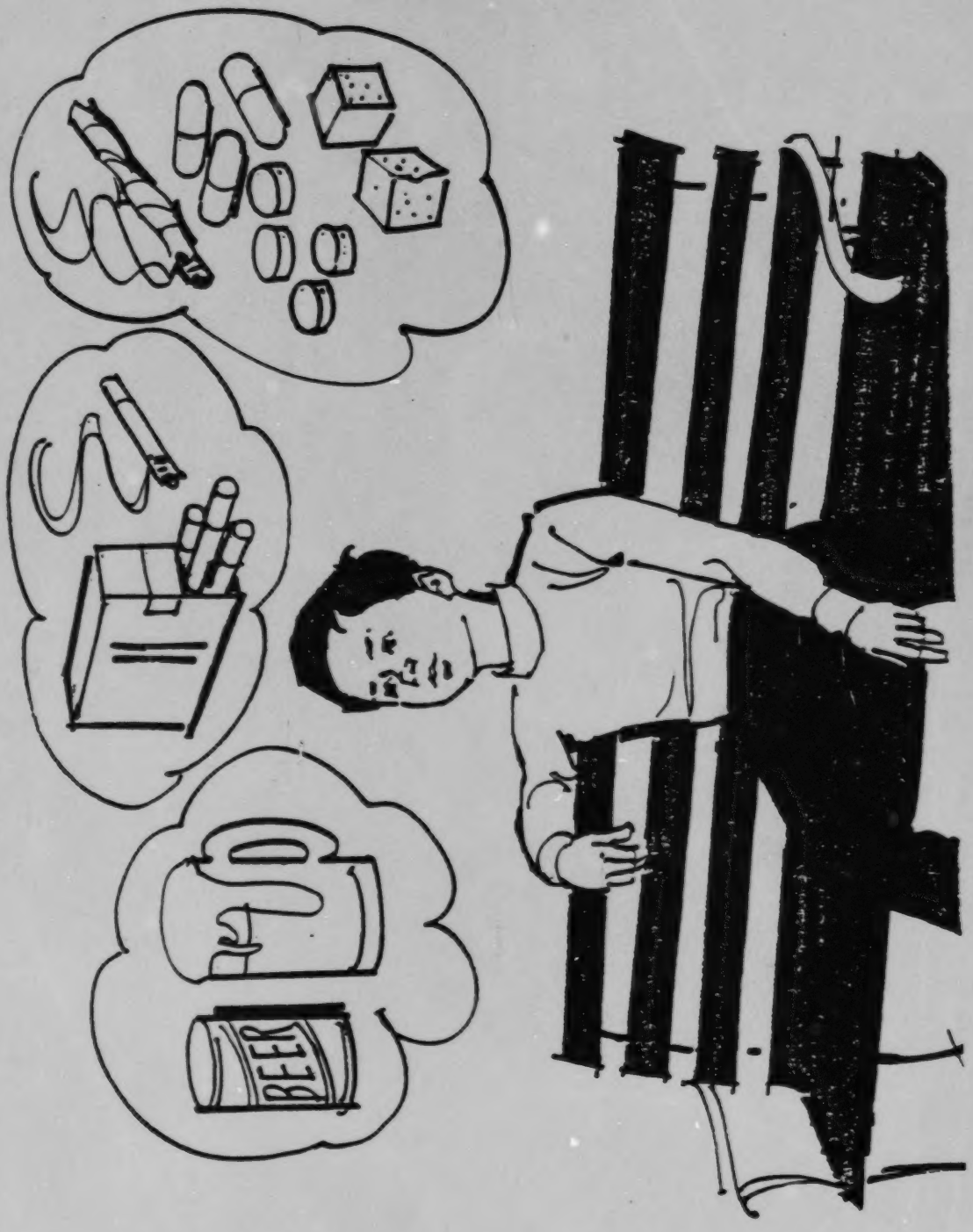
Discuss vocabulary words with students.

amphetamines	distilled	narcotics	marijuana
aspirin	ethyl alcohol	stimulant	alcohol
barbiturates	hallucinogens	substances	
caffeine	heroin	tranquilizer	

ENRICHMENT/REINFORCEMENT:

Have each student draw a picture of an activity that is not harmful to the body and helps a person to have fun and feel better. Cut an outline around the picture and paste together into a collage titled "Healthy Ways to Change The Way You Feel." Display on a bulletin board.

Transparency A Objective 4 - 2.3.1



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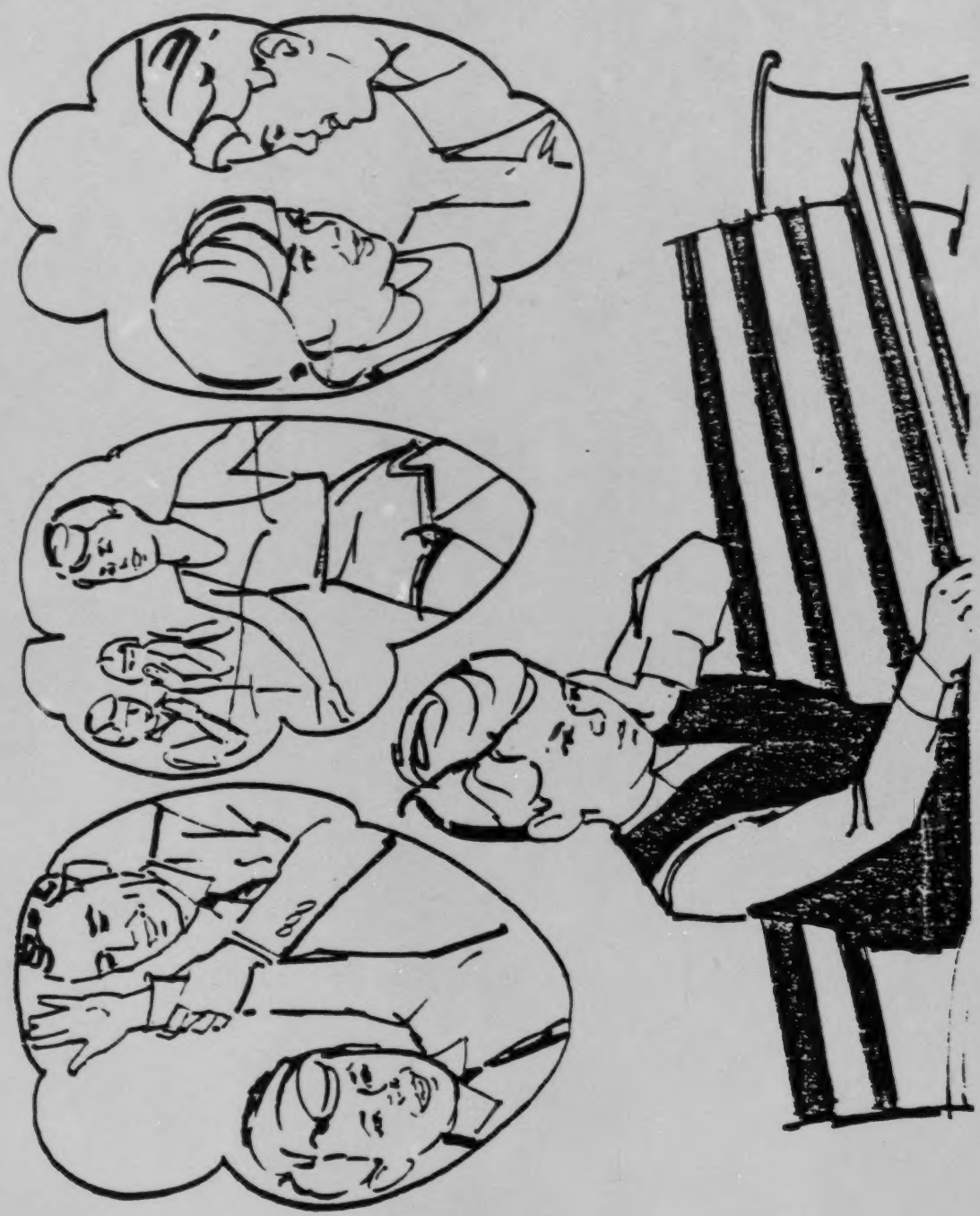

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Transparency D Objective 4 - 2.3.1

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Transparency E Objective 4 - 2.3.1

Transparency F Objective 4 - 2.3.1

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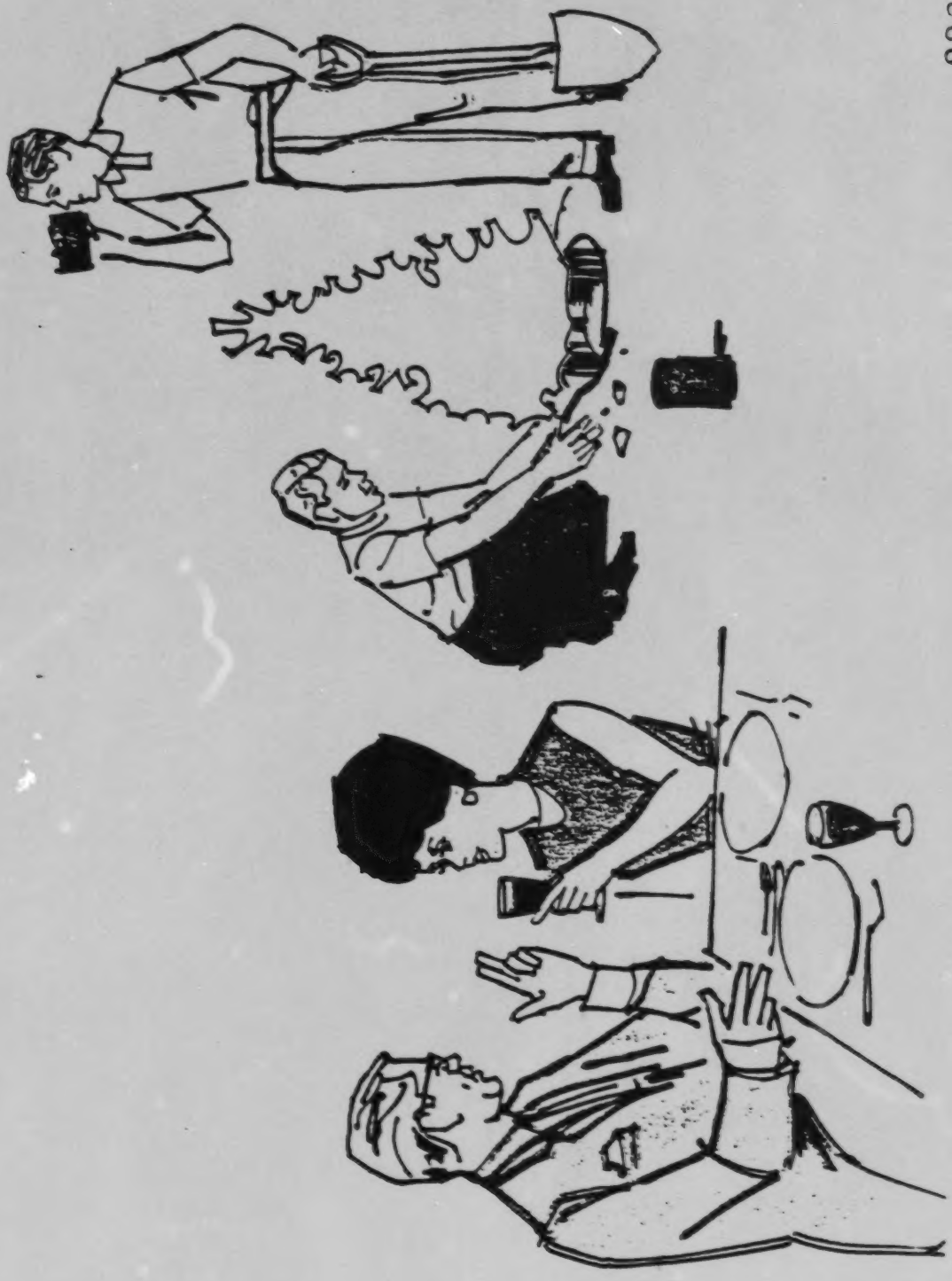
Transparency G Objective 4 - 2.3.1



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Transparency J Objective 4 - 2.3.1

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Barbiturates

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Amphetamines

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Transparency N Objective 4 - 2.3.1

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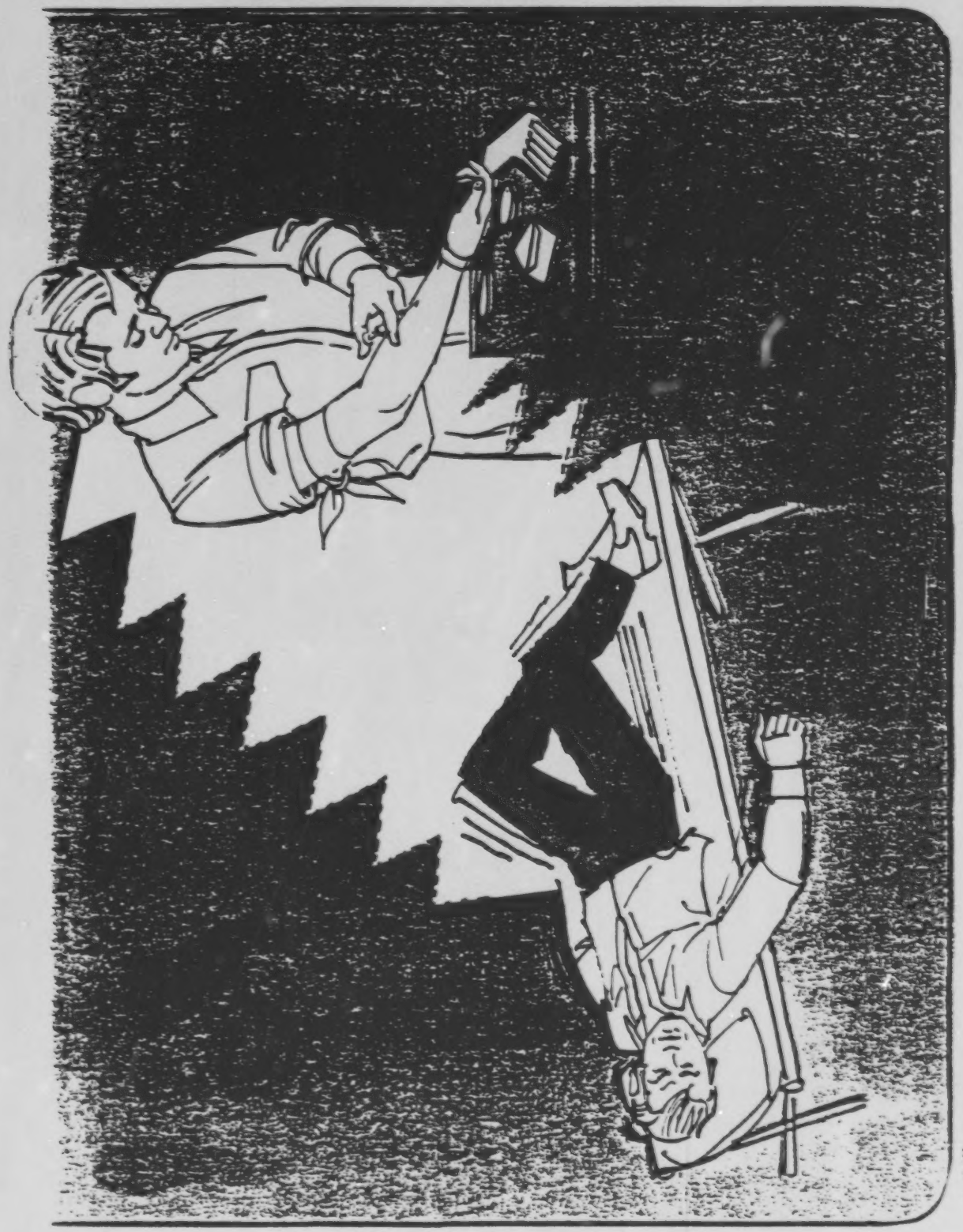
Transparency 0 Objective 4 - 2.3.1



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Transparency Q Objective 4 - 2.3.1

Mild ⟶ to ⟶ Strong

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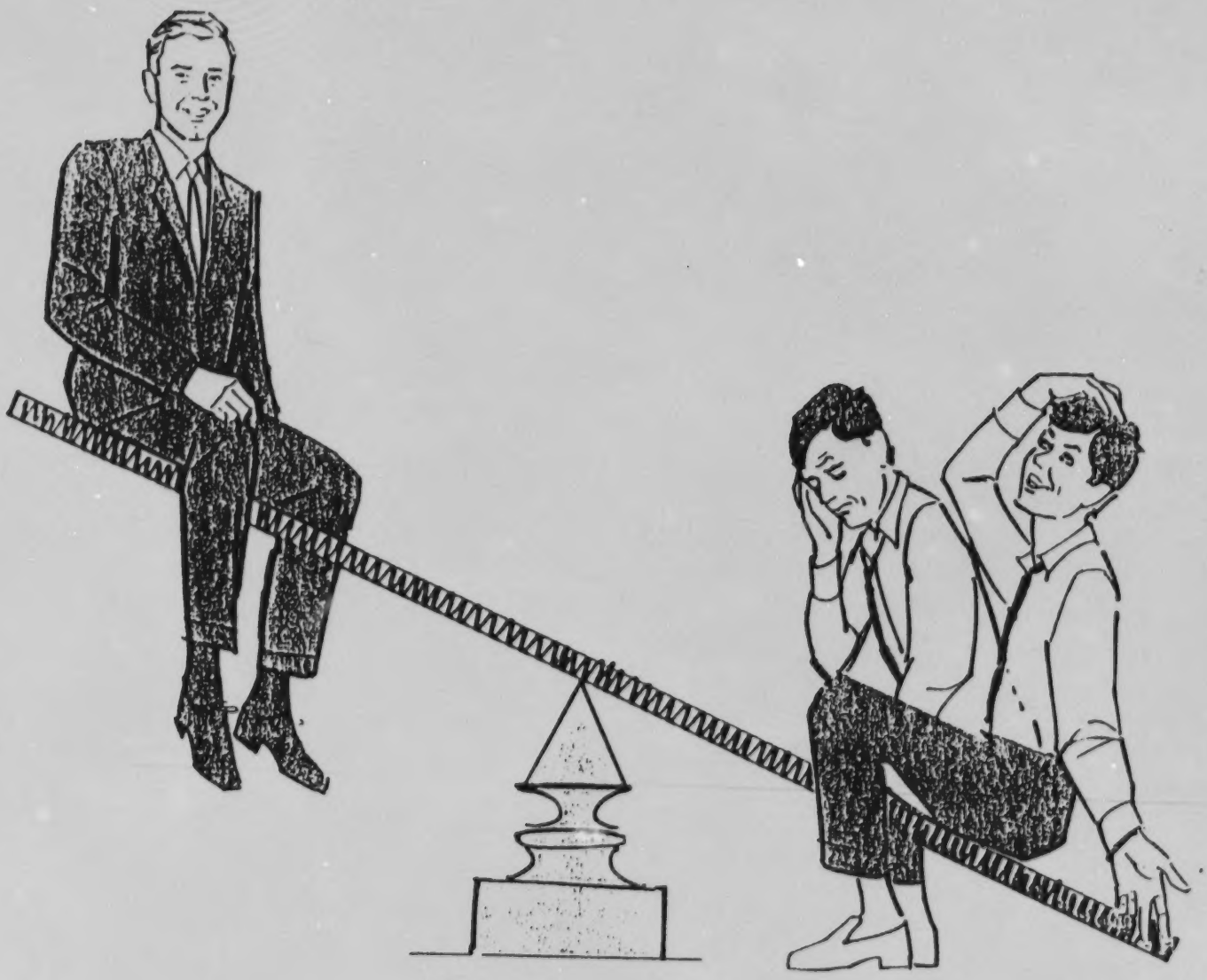

Personality

251

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LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Identity Mood Modifiers	4.V.1, 4.C.1	45 minutes

OBJECTIVE 4 - 2.3.2 Describe how mood modifiers affect the proper functioning of the body.

INSTRUCTIONAL MATERIALS:

Filmstrip Series: Marsh Film, Drug Education Series
Filmstrip: "Drug Abuse: Who Needs It?"
Manila drawing paper
Crayons
Poster board

PROCEDURES:

This filmstrip presents in narrative form (story of a boy who becomes involved with drugs) some of the dangers of drug abuse. Several drugs are identified; marijuana, narcotics, barbiturates, and amphetamines.

In this filmstrip you will discover several important facts concerning drug abuse. Listen to and remember what can happen to the way a person functions when each of the drugs mentioned are used.

Show filmstrip.

EVALUATION:

Discuss the following vocabulary with the students.

addiction	heroin	amphetamine	intoxication
barbiturate	LSD	depression	marijuana
drug abuse	narcotic	hallucinogen	hemp plant
sedative	psychological dependence		

ENRICHMENT/REINFORCEMENT:

Have students choose a drug from the filmstrip and write a story of a young person who becomes involved in using the drug. Make sure examples of amphetamines, barbiturates, narcotics, and hallucinogens are chosen. Ask them to include in their story the dangers involved with its usage. Ask for volunteers to share their story with the class.

LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Effects of Mood Modifiers	4.C.7	45 minutes

OBJECTIVE 4 - 2.3.2 Describe how mood modifiers affect the proper functioning of the body.

INSTRUCTIONAL MATERIALS:

Pamphlets:
+Some Substances Used For Nonprescribed Drugging Effects, Pharmaceutical Manufacturers Association.
+L.S.D., Some Questions and Answers, National Clearinghouse for Drug Abuse Information.

Booklets:
+Drug Abuse Prevention, Department of Health, Education, and Welfare.
*Alcohol - Do You Know Enough About It?, Addiction Research Foundation.
*Drugs and You, Channing L. Bete, Co., Inc.
+The Way To Go, Kemper Insurance Companies.

(Copies of each pamphlet are available in your media center. Any pamphlet or booklet approved by the Health Education Curriculum Department, may be substituted.)
+Teacher information
*Student information

PROCEDURES:

Separate the class into four groups. Assign each group to a different category: 1) amphetamines 2) barbiturates 3) hallucinogens 4) alcohol. Assign groups 1, 2, and 3 to use the booklet Drugs and You. Assign group 4 to use Alcohol, do you Know Enough About It? Have students create a comic strip on the effects of the drugs on the body.

EVALUATION:

Have each group share with the class their comic strip.

ENRICHMENT/REINFORCEMENT:

Have students arrange, organize, and display their comic strips on the bulletin board.

LESSON PLANS

CONCEPT/SKILL Effects of Mood Modifiers	TEST IMS 4.C.7, 4.C.8	ESTIMATED TIME 45 minutes

OBJECTIVE 4 - 2.3.2 Describe how mood modifiers affect the proper functioning of the body.

INSTRUCTIONAL MATERIALS:

Filmstrip: Educational Activities, Inc., Smoking and Children,
Part I: "Story of Tobacco"
Part II: "Effects of Smoking"

PROCEDURES:

There are many important facts concerning cigarette smoking. In this filmstrip, we will learn of the history of cigarette smoking and how smoking affects the proper functioning of our bodies.

Show filmstrip.

EVALUATION:

Use the following suggested questions to stimulate discussion.
What are some early forms of tobacco?
Are they still used today?
Who was John Rolfe?
When did cigarette smoking begin in the United States?
What factors should be considered when deciding whether or not to smoke?
What proof do we have that cigarette smoking is harmful?
What harmful substances are contained in cigarette smoke?
What effect does cigarette smoking have on the respiratory system?
What parts of the respiratory system are affected?
What is the disease emphysema and how does it affect our bodies?
How does cigarette smoking affect the heart and blood vessels?
How does cigarette smoking affect the digestive system?
How does cigarette smoking affect the body mentally?
What are three major health problems which occur from cigarette smoking?

ENRICHMENT/REINFORCEMENT:

Research in the media center or at home various diseases related to cigarette smoking.

LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Use/Misuse Mood Modifiers	4.V.1, 4.C.8	45 minutes

OBJECTIVE 4 - 2.3.3 Identify steps in making responsible decisions concerning use/nonuse of mood modifiers.

INSTRUCTIONAL MATERIALS:

Filmstrip Series: Marsh Film, Drug Education Series,
Filmstrip: "Drugs: Friend or Foe?"
Booklet: Health and Growth Enrichment Booklet, "Drugs and Your Safety," Scott, Foresman and Company, pages 14-22. (available in your media center.)

PROCEDURES:

This filmstrip introduces the benefits of proper drug use and the hazards of drug misuse. Let's view the filmstrip and learn some ways we can make responsible decisions concerning use/nonuse of mood modifiers.

Show filmstrip.

EVALUATION:

Use the suggested questions to stimulate discussion.
What are some ways in which drugs are our friends?
What are some common household drugs that we might find in most homes and which we often take for granted?
What's an example of a preventive medicine?
What are the rules that we should follow so that medicines can help us?
At what point, would drugs be our foes?

Discuss vocabulary words with students.

abuse	infection
accidental	medicine
aerosol	misuse
antibiotic	penicillin
antiseptic	poisoning
bacteria	prescription
disease	preventive
drugs	privilege
foe	suffocation
germs	vaccination
immunization	virus

OBJECTIVE 4 - 2.3.3

ENRICHMENT/REINFORCEMENT:

As you have learned, drugs can help people if they are used in the right ways. On the other hand, drugs can be harmful. They are unsafe when they are used as they are not supposed to be used.

How much do you know about safety in the use of drugs?

Divide the class into groups and have them role play the following situations and make responsible decisions concerning use/nonuse of mood modifiers.

Situation I

What Will You Do With It?

Suppose you have just come back from the drugstore. You have brought home some medicine for your mother. Your mother is busy in one room. She is talking on the telephone. Your little brothers are playing in another room nearby.

What will you do with the medicine?

Situation II

Will You Take It?

Now suppose you are coughing. You want some cough medicine.

Will you take it by yourself?

Stop and think. What will you do?

Situation III

What Is The Safe Thing To Do?

Suppose someone offers you a little pill. Suppose this person says to you, "Try this pill. It is good. You will like it."

Stop and think. What will you do?

Situation IV

Should You Try It?

Suppose someone tells you to stop work on your model plane and just sniff the glue.

"Sniff and sniff and sniff," the person may say. "It will make you feel good. Try it."

Stop and think. What should you do?

Situation V

Would You Take The Date?

Now suppose someone dares you to do something that is not safe to do. The person may dare you to take a pill or sniff glue to take someone else's medicine.

Stop and think.

What will you say to a dare like this?

What will you do?

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Mood Modifiers	4.C.8	45 minutes

OBJECTIVE 4 - 2.3.3 Identify steps in making responsible decisions concerning use/nonuse of mood modifiers.

INSTRUCTIONAL MATERIALS:

Kit: American Cancer Society, Health Networks Special People, (available in media center).
Filmstrip: "Special People"
Teacher's guide
Repro master: "Portrait of _____, A Very Special Person" (Master included, make a copy for each student.)

PROCEDURES:

Choose one of the following topics and write the heading on the chalkboard:
My Favorite Vegetable
My Favorite Sport
My Favorite Color

Share your personal favorite with the class. For example you might say, "My favorite vegetable is brussel sprouts." List your choice on the board and ask the students to share their favorites with the class. The list might look like this:
My Favorite Vegetable
Brussel sprouts--Ms. Engel
Potatoes--Mark
Hates vegetables--Annie

When everyone who volunteers has contributed, discuss the variety of responses and point out how tastes vary from person to person.

Ask the students to think of other ways in which people differ. For example, how they look, what they are good at, how they choose friends, what they want to do when they grow up.

Discuss how each of us, with our special likes, dislikes, looks, talents, and skills is a special person, unique from everyone else.

Show the filmstrip and ask students to find out what happened to Scott when he began to feel he wasn't special enough.

OBJECTIVE 4 - 2.3.3

EVALUATION:

Use the following suggested questions to stimulate discussion.
Without making judgments about whether his behavior was right or wrong, why did Scott have the feelings he did?
Why did Scott leave the audition?
What were his feelings about himself?
Did Scott's friends see him as he saw himself?
What harmful choices did Scott make that made him feel even worse about himself?
What made Scott accept his real self again?
How do you think Scott will care for his health now that he feels good about himself?

Assign repro master "Portrait of _____, A Very Special Person" and ask students to answer the questions to provide a portrait of their unique special self.

ENRICHMENT/REINFORCEMENT:

Additional activities are available in the teacher's guide for further enrichment.

Choose answers to questions from self portraits that students have volunteered to be shared and have class identify who the special person is.

Objective 4 - 2.3.3

PORTRAIT OF_____, A VERY SPECIAL PERSON

REPRO 189
MASTER 2

1. Please write a short description of yourself. Include things like what color hair and eyes you have, how tall you are, or what kind of clothes you like to wear.

2. Name the members of your family and tell who they are. (Include pets!)

3. Name your favorite and your least favorite

tv show	_____	toy	_____
outside game	_____	book	_____
inside game	_____	movie	_____

4. Name your favorite and your least favorite

main dish	_____	vegetable	_____
fruit	_____	dessert	_____

5. What is your favorite thing to do after school or on weekends?

6. What rule bothers you most?

7. If you could change one thing about your life, what would it be?

8. What are some things that you're good at?

9. What do you want to do when you complete your education?

CONCEPT/SKILL Health Problems	TEST IMS 4.C.8	ESTIMATED TIME Two 45-minute periods

OBJECTIVE 4 - 3.1.1 Explain the effects of health problems upon the individual, his family, and his community.

INSTRUCTIONAL MATERIALS:

3M Company, School Health Education Study, Concept 5, Level II-D, "Transparencies A, B, D, E, G, O, P,and Q." (Masters included, colored set available in your media center.)

PROCEDURES:

At some time during your life someone in your family will probably have a health problem which will affect you and other family members in some way. Have students volunteer to share a time someone was sick in their family and how it changed things in their home. Explore with them any ways it affected the community. How did the individual's life change as a result of the illness?

These transparencies will help us to understand the effects of health problems upon the individual, his family, and his community.

Show transparencies and use suggested questions to stimulate discussion.

Transparency A
What might the medical items at the top of the picture have to do with the family below?

Transparency B
Why do lines connect the family with points on the map?
What are these items?
Why do you think the map, the family, and these items are grouped together?
Do health problems in families affect communities? If so, in what way?
Do family health problems affect countries? How?

Transparency D
Can you name other ways disease might affect a person physically? Mentally? Socially?
What diseases or disabilities might cause each of these effects?
Can a disease cause more than one of these?

OBJECTIVE 4 - 3.1.1

Transparency E
What is happening in each of these scenes?
How are these three scenes alike? Different?
Whom is the disease affecting?
How do you think the persons in each scene are affected physically? Mentally? Socially?
Are there others not shown who might be affected?
In what specific ways might these people be affected?

Transparency G
How is disease affecting these people physically? Mentally? Socially?
Can you find an effect of disease that is common to all four?
Are there other people in the lives of the persons on this visual whom each situation might affect?

Transparency O
If this were a headline in the local paper, how do you think your mother and father would react?
How might this disease affect the businesses and the schools in the community?
What is this man doing?
What do you think is the connection between his work and the newspaper headline?

Transparency P
Why do you think this man is spraying around the hut?
Will he do it to other houses?
Do you think this community is aware of the effects of disease? If so, why do you think this?
Where do you think the modern spray equipment came from?

Transparency Q
What do these people hope will be done by the health officer?
Why are they receiving eyedrops?
Who might have paid for the materials to do this?

EVALUATION:

Have students label the top of a sheet of paper in three columns with the following words: Individual, Family, Community. Ask them to give three examples of a way a disease affects an individual in these ways.

OBJECTIVE 4 - 3.1.1

ENRICHMENT/REINFORCEMENT:

Have students choose a disease to report on which affects an individual, family, and community. (Examples: measles, polio, tuberculosis, heart disease, cancer of any kind, diabetes). They may have a personal example of a disease in their family they would like to research. Have them include how the disease affects the individual physically, socially, and mentally.

Have students bring in newspaper and magazine articles that deal with disease. Share with the class how the disease affects the individual, his family, and community.

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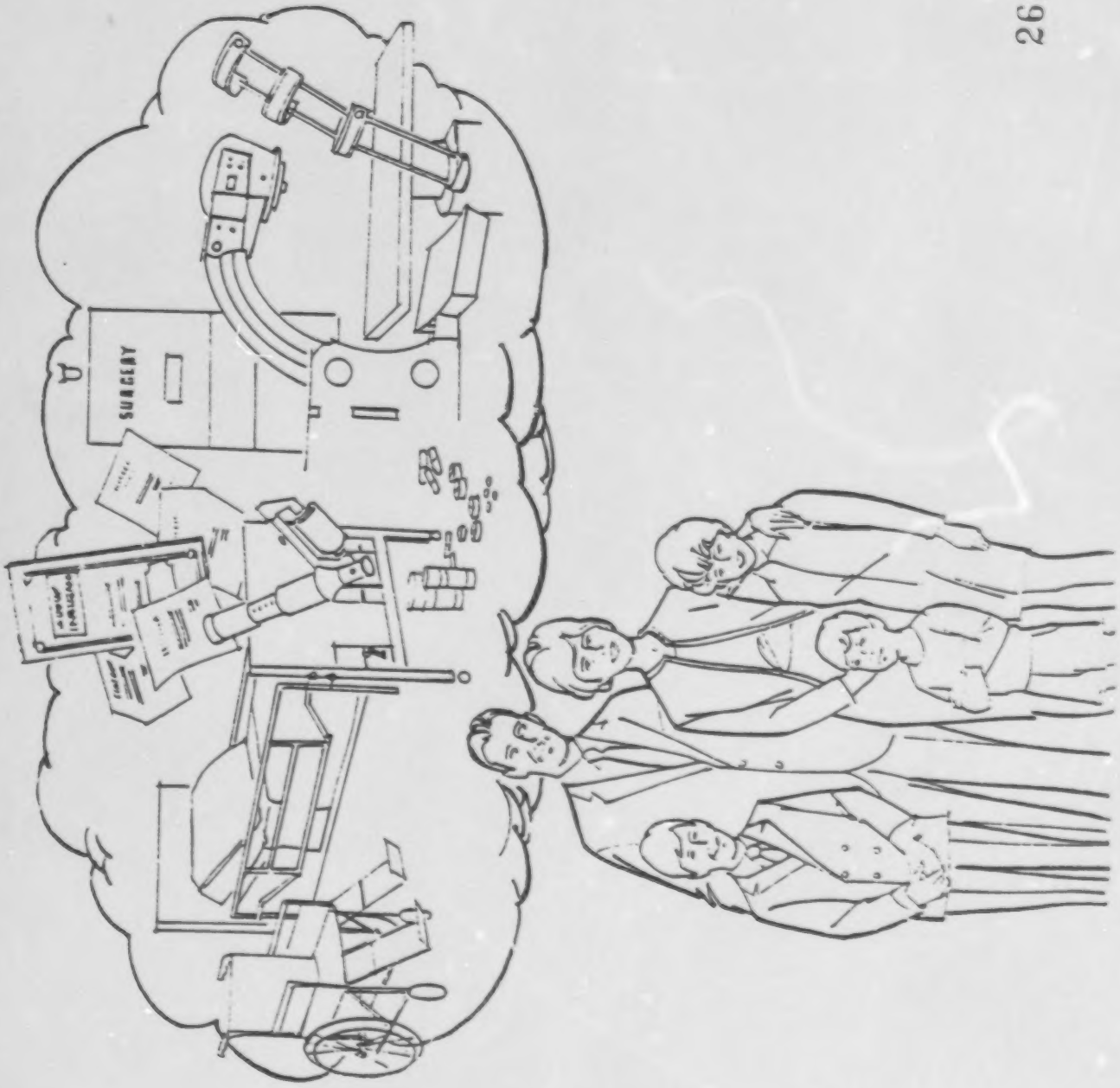

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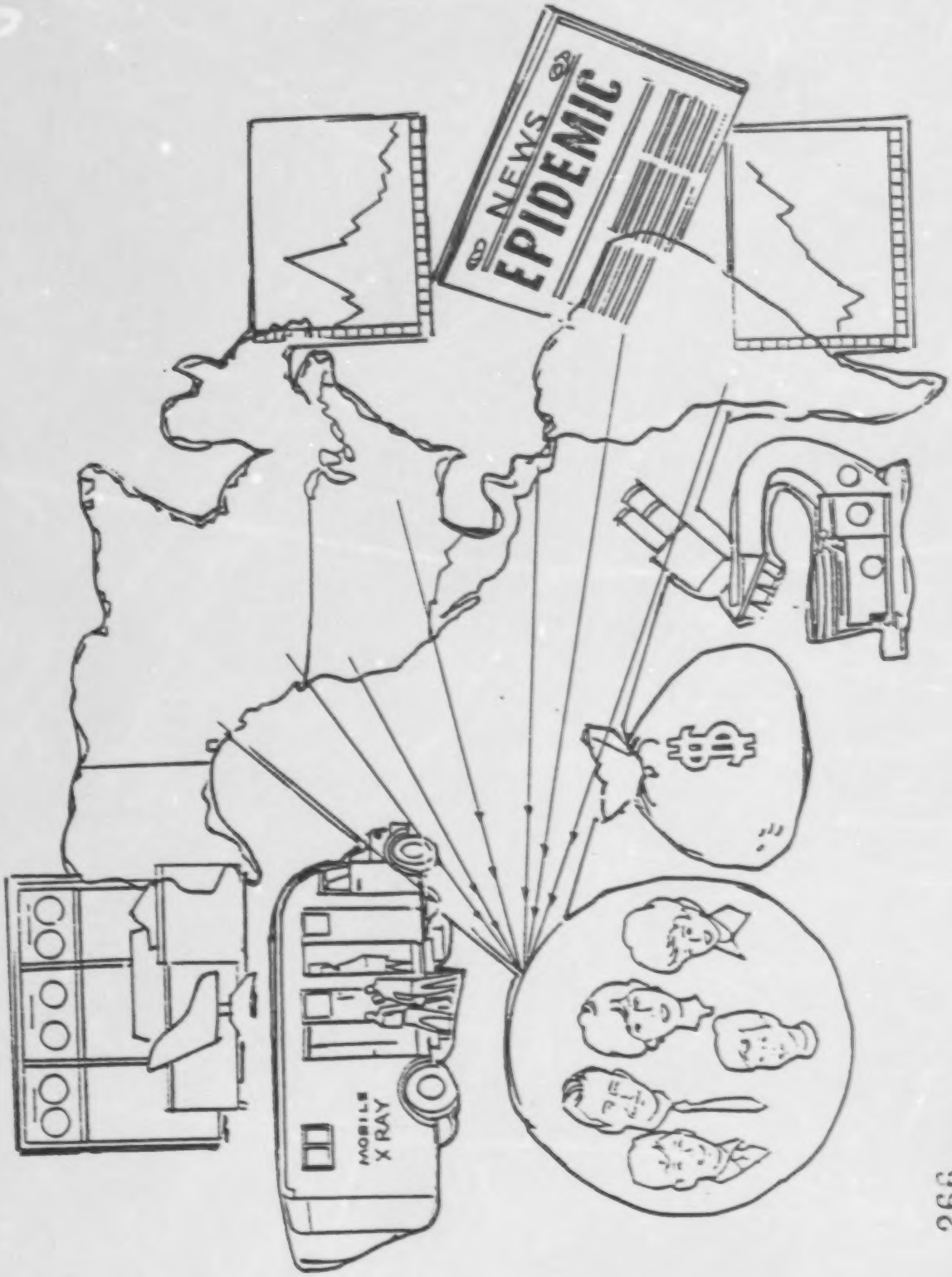
Transparency B Objective 4 - 3.1.1



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Disease Affects

Pained
Tired
Weak
Sore
Uncomfortable

Physically

Worried
Fearful
Tense
Afraid
Depressed

Mentally

Unwanted
Different
Left Out
Misunderstood
Useless

Socially

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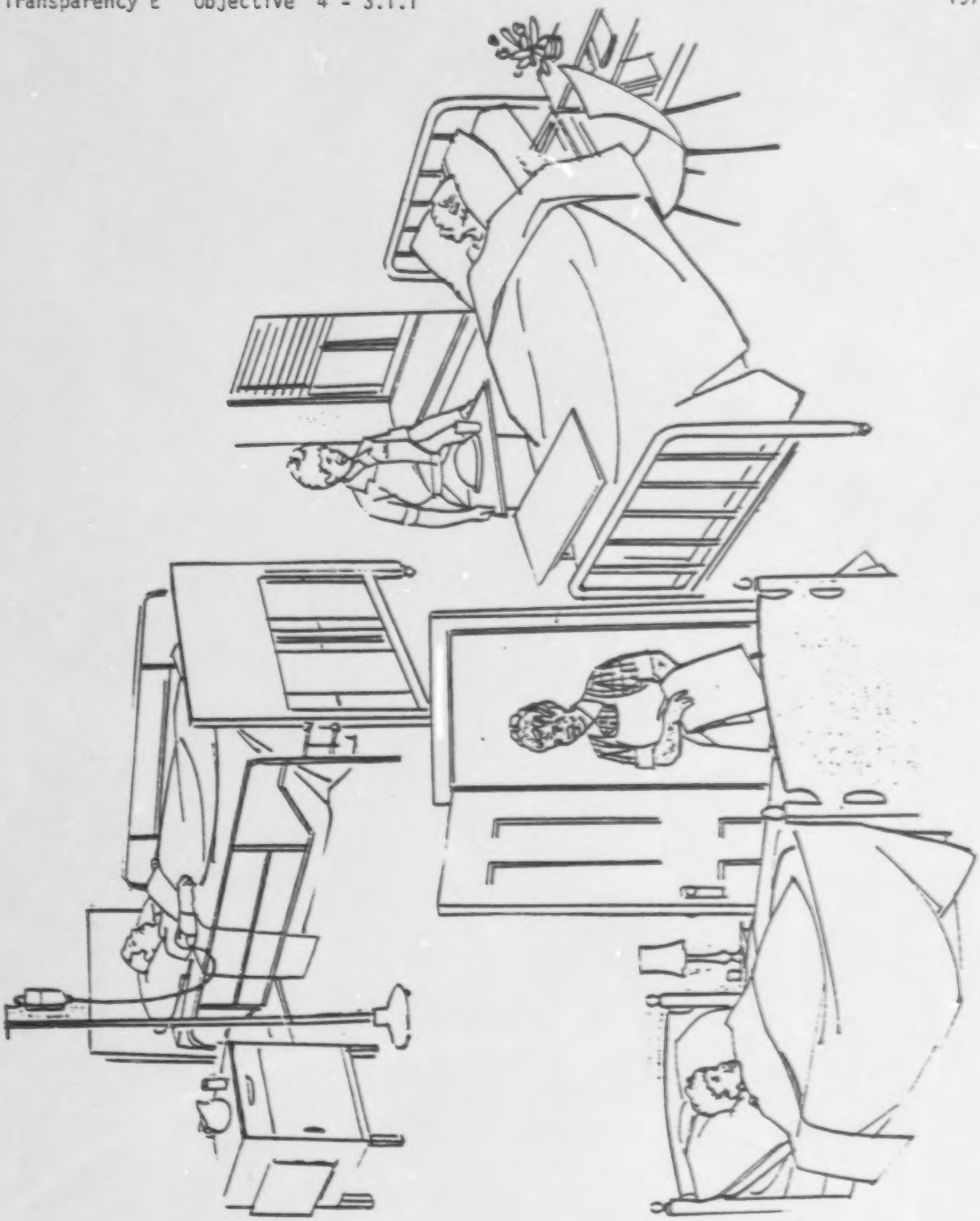

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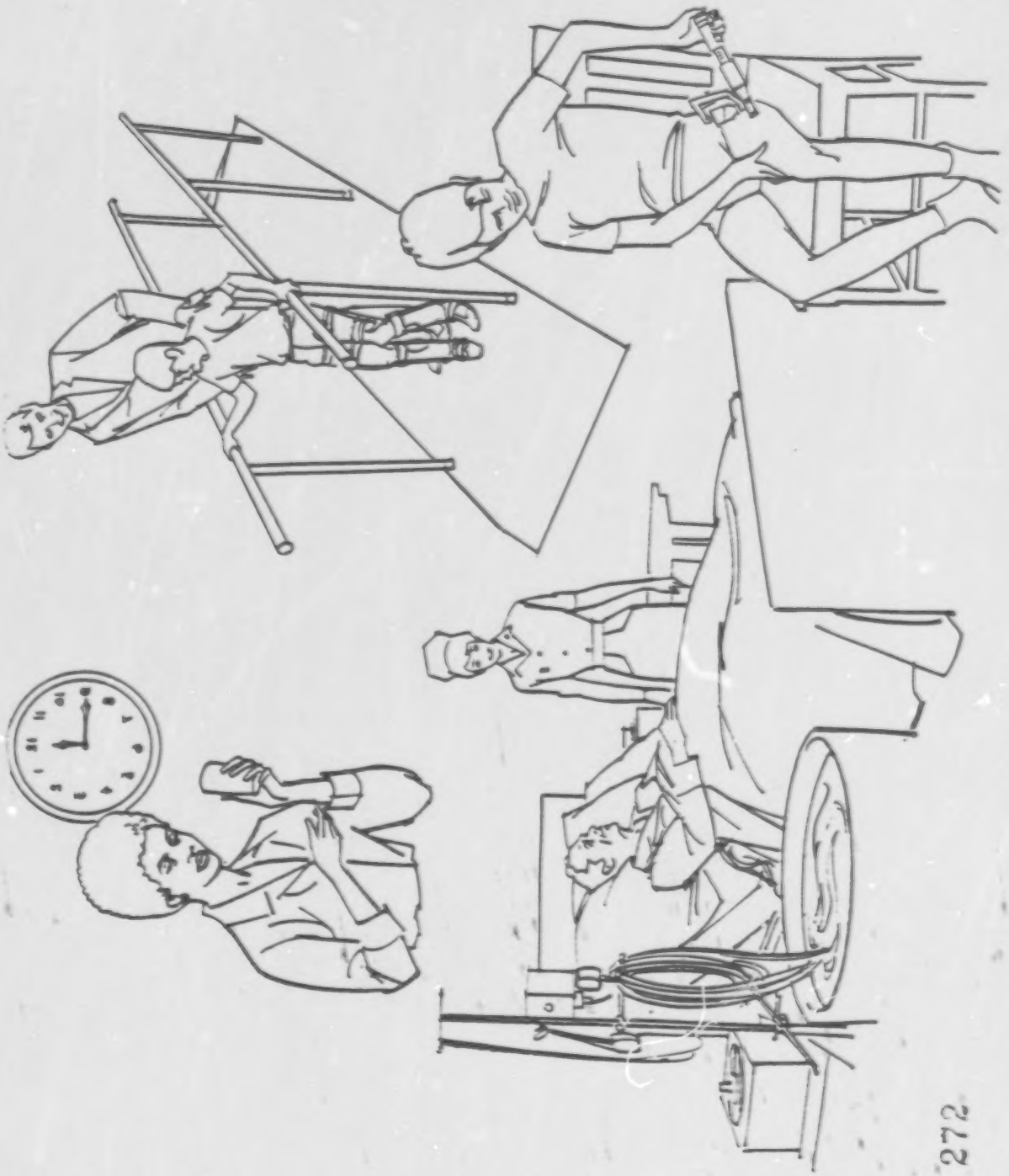
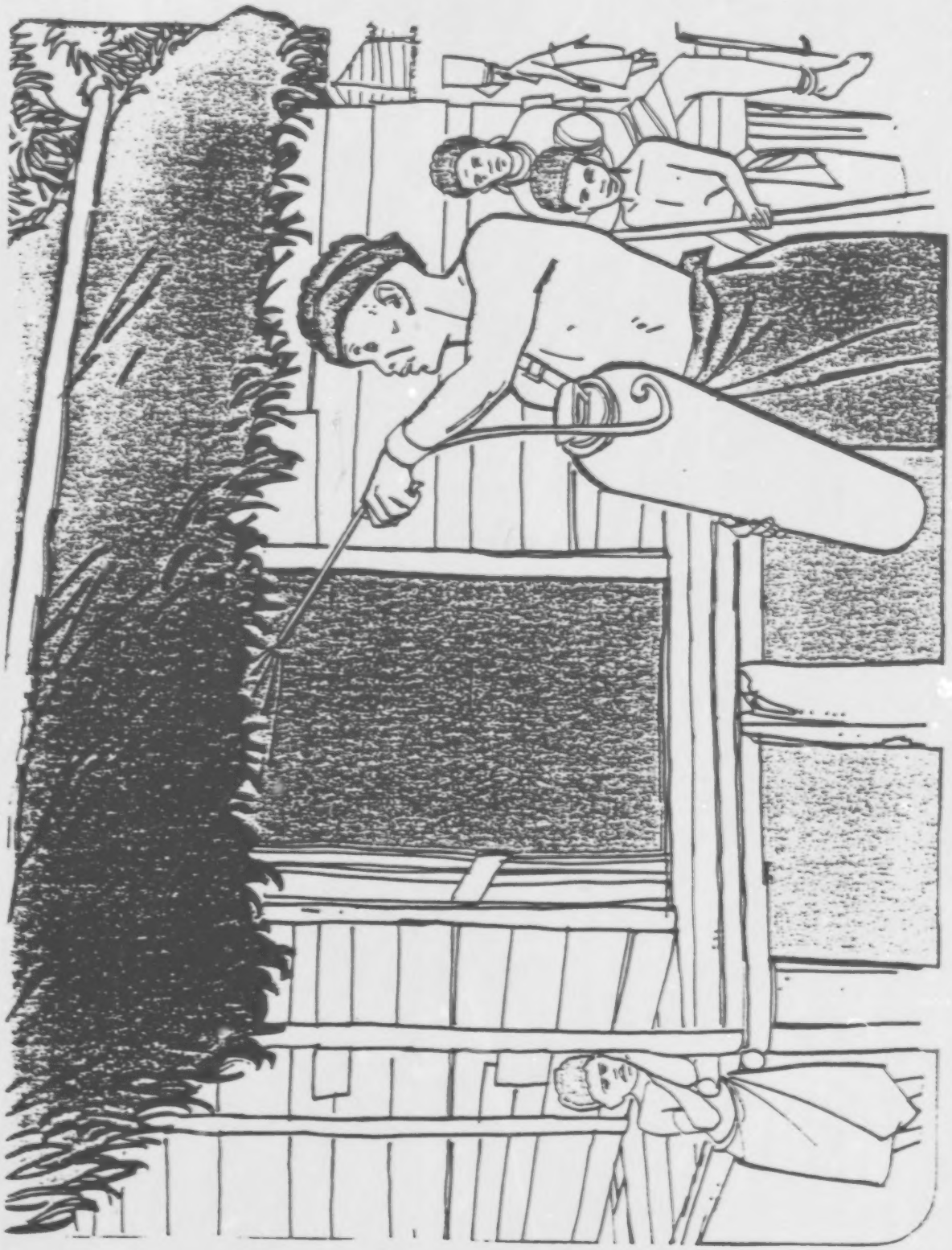
Transparency G Objective 4 - 3.1.1

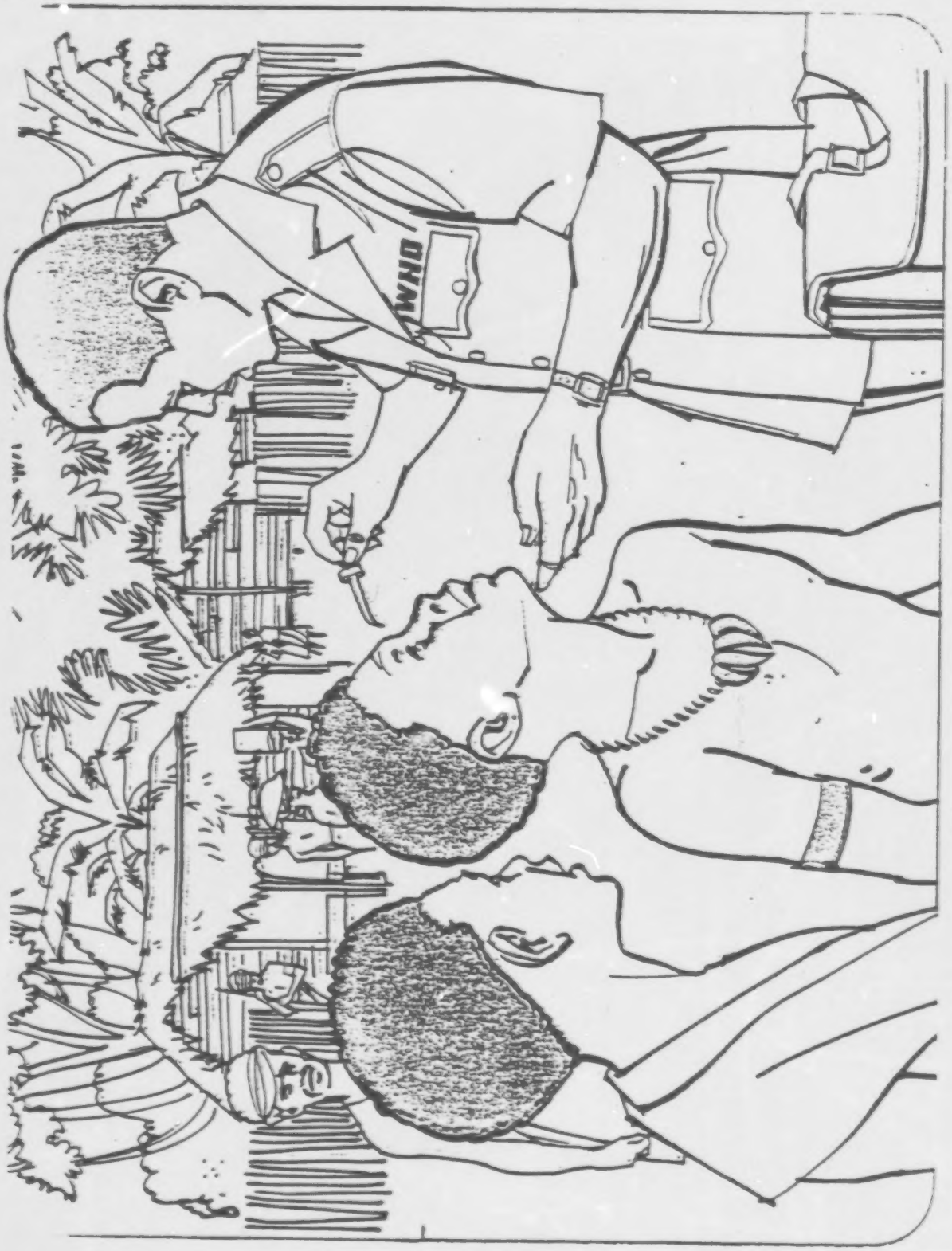


Unknown Virus Hits Area

Transparency P Objective 4 - 3.1.1



Transparency Q Objective 4 - 3.1.1



LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Health Problems	4.C.6, 4.C.7, 4.C.8	Two 45-minute periods

OBJECTIVE 4 - 3.1.1 Explain the effects of health problems upon the individual, his family, and his community.

INSTRUCTIONAL MATERIALS:

Lung Heart Module, American Lung Association, Lungs Are For Life.
Teaching Poster: "The Air We Breathe"
Activity Sheets: #4 and #8. (Masters included, make a copy for each student.)
Teacher Resource:
Booklet: American Lung Association, Air Pollution Primer (Copy available in your center.)

PROCEDURE:

Explore with the students how much they know about air pollution by brainstorming all of these causes of pollution they can think of.

Introduce the teaching poster "The Air We Breathe." This is a community where people live and work. Ask students to point out objects on the poster that pollute-) burning fuels like gasoline, oil, and coal, 2) manufacturing products, 3) crops that are sprayed, 4) dumping waste, and 5) littering.

Use the following questions to stimulate discussion.
Who is responsible for causing most pollution?
Why is pollution more a problem today than 200 years ago?
Is pollution bad for your health?
Do you have to be able to see pollution in order for it to be harmful?
Does the pollution caused by one city only affect that city?

Refer to teaching poster again. Have students point out examples of how we can cut down on pollution by using energy more efficiently.

EVALUATION:

Distribute activity sheet #4 "Air Pollution: Who Does It?" Have students read the introductory material on pollution and follow directions for completing the page.

OBJECTIVE 4 - 3.1.1

ENRICHMENT/REINFORCEMENT:

Read to students the following moral dilemma.
Ace Toy Company is the major employer in Wrightstown. Most of the students' parents work in the factory. It is also the major source of taxes which go toward paying school and community expenses.

Recent headlines in the newspaper state that there is a very high rate of respiratory disease in the community; causes that were directly linked to the noxious fumes from the plastics manufactured by Ace. What should be done?

Ask students to vote on one of the following positions by raising their hands.

1) close the plant down
2) regulate the amount of noxious fumes that can be emitted each day
3) fine the company a large sum of money
4) allow the company to continue since it is important to the community.

Have students volunteer to give their reasons for voting.

Students may enjoy investigating non-polluting sources of energy such as hydroelectric energy, wind power, and solar energy.

Assign student sheet #8 "Breathing Free: What You Can Do." Have them complete the activity and take it home to share with their family.

4 Air Pollution: Who Does It?

Pollution (poe - LEW - shun) means that something isn't clean and pure. **Air pollution** is clean, pure air mixed with smoke, dust, dirt and poison gases. Sometimes it is dark and smoky or hazy like **smog**. But, sometimes polluted air looks clean and clear. It may still contain harmful poison, no matter how it looks.

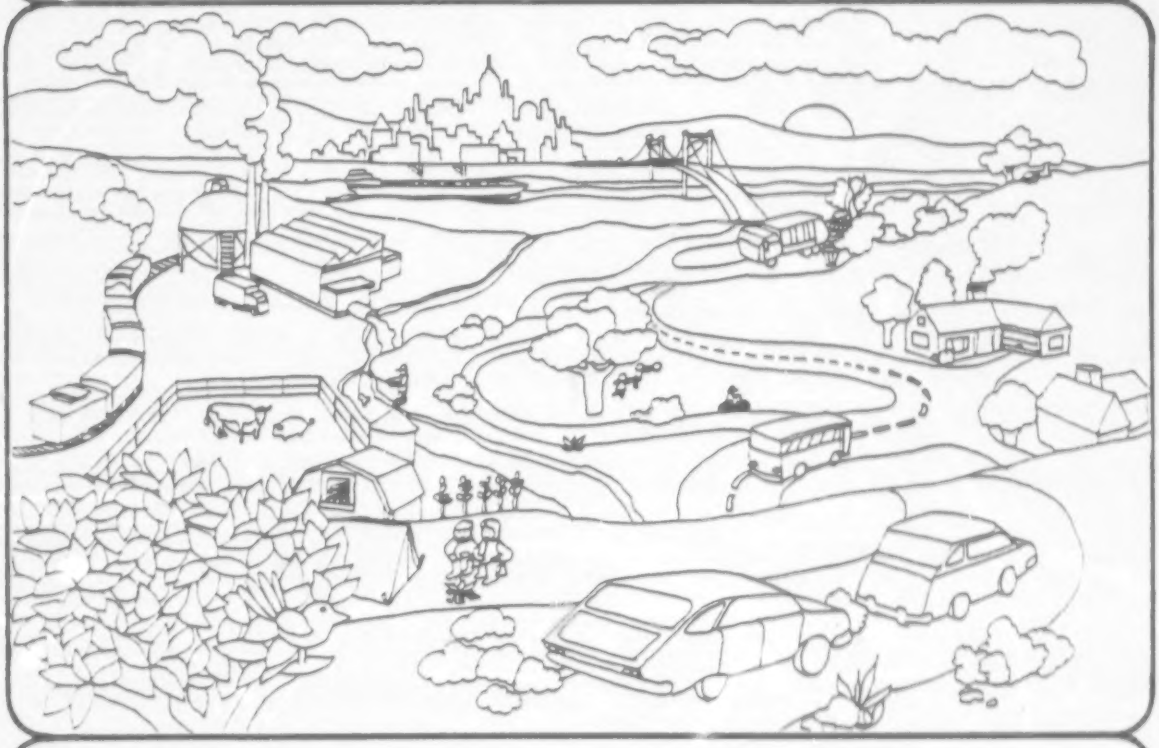
Air pollution mostly comes from burning. Our society burns a lot of things today. Cars burn gasoline for power. Buses burn **diesel** (DEE - sell) fuel. We heat our homes by burning oil. We make electricity by burning coal, oil, or gas. We burn trash in garbage dumps. In some places, we burn leaves in the fall. All glass, metal, paper, plastic, cotton, wool, and wood products are made by burning fuel.

Air pollution is a big problem. Look at the picture below. Put a big **X** over each thing you think might cause air pollution.

List three sources of air pollution you think you could live without. Number one should be the thing you think you could live most easily without; number two would be harder to give up; number three would be the hardest. Why do you think you could live without each source of pollution?

Use back of this sheet for answers.

1 _____ 2 _____ 3 _____



There are some things in the picture above that don't hurt our air. List as many as you can.

_____ _____ _____

_____ _____ _____

_____ _____ _____

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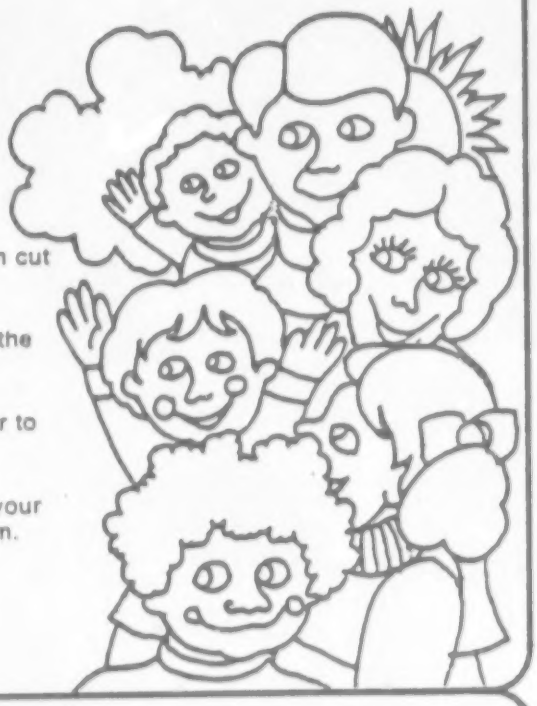
Objective 4 - 3.1.1

Day 12
Student Activity
Sheet Eight

8 Breathing Free: What You Can Do

Here's a list of 8 things you can do to help yourself and everyone breathe free. They are little things, but they make a big difference if lots of people do them. So, take this list home with you. Put it someplace where everyone in your family can see it. Spread the word to your friends too. It's up to you to lead the way. (Put an "M" in front of everything you will try to do; an "F" in front of the things you will help your family to do; an "O" in front of the things you will tell other people to do.)

- ☐ 1 Learn about the dangers of smoking.
- ☐ 2 Tell the facts about smoking to anyone you know who is just starting to smoke.
- ☐ 3 Ride a bike or walk instead of always using the car.
- ☐ 4 Learn how using public buses and trains can cut down on air pollution.
- ☐ 5 Make sure not to burn leaves or garbage in the open air.
- ☐ 6 Organize a car pool if you must travel by car to school.
- ☐ 7 Find out who the major air polluters are in your community and what you can do about them.
- ☐ 8 Avoid using paints, glues, bug killers, deodorants, air fresheners and household cleaners that come in spray containers.



What else can you think of that will help everyone to breathe free?

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LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Health Problems	4.C.6, 4.C.7, 4.C.8	Two 45-minute periods

OBJECTIVE 4 - 3.1.1 Explain the effects of health problems upon the individual, his family, and his community.

INSTRUCTIONAL MATERIALS:

Lung Heart Module, American Lung Association, Lungs Are For Life.
Activity Sheet: #5
Pamphlet: American Lung Association, Air Pollution-The Facts About Your Lungs.

PROCEDURE:

Air pollution has a damaging effect on things, plants, animals, and people. To demonstrate an example of "cause and effect," flip the light switch and let the lights go out or drop a book and let students hear a sound.

Ask the students if they have ever seen any damage on something that might have been caused by air pollution? (rust on handle bars, wheels and pedals, cracked tires, dirt on window shades/sill, dirt on outdoor furniture) The rust, corrosion, disintegration and dirtiness are effects caused by air pollution.

Discuss with the students any physical effects they may have felt caused by air pollution. (watering eyes, sore throat, dizziness, headaches) Ask them where they were when they experienced this and what they think the cause of it was? (cars, factories, smoke stacks, etc.)

EVALUATION:

Have students divide a sheet into two columns and label the top with the words cause and effect. Classify the following terms as cause or effect of air pollution.

emphysema	carbon dioxide	factories	sheep
smoke stacks	rust	lung cancer	fires
smog	headaches	garbage dump	cigarette smoking
cars	asthma	plant diseases	aerosol spray cans
hay fever	pneumonia	watering eyes	home heating units

Objective 4 - 3.1.1

ENRICHMENT/REINFORCEMENT:

Have students research the effects of air pollution on the following respiratory problems/diseases: emphesema, bronchitis, asthma, hay fever, pneumonia, lung cancer.

List to the weather report to find out the pollution index for the day and decide if older citizens, very young people, or people with respiratory diseases should stay inside.

Use the pamphlet "Air Pollution, The Facts About Your Lungs" to find and discuss examples of communities that have experienced severe effects on their health from air pollution.

Research groups of citizens who have banded together to work toward clean air. (examples: American Lung Association, Environmental Protection Agency, Sierra Club, Bio-environmental Services of the City of Jacksonville.)

Student Activity Sheet Five

5 Air Pollution: What Does It Do?

Even when you can't see it, air pollution is at work. The chemicals in the air hurt things, plants, animals and even people. Here is how pollution harms us and our environment (en - VI - run - ment):

Things — Air pollution makes paint peel off of houses. It also changes the color of paint. Pollution dirties clothing, curtains, and your furniture at home. The poisons in the air are like millions of little pieces of sandpaper constantly rubbing away at buildings, statues, cars, bridges, your bicycle. Pollution makes rubber tires crack. It rusts everything made of iron and steel.

Plants — Air pollution blocks out the sun. This makes all plants grow slower. The poisons in the air hurt trees, bushes, fruits, and vegetables and make their green leaves dry and brown. Sometimes, air pollution makes the leaves all turn yellow and drop off. Even plants in your house are hurt by cooking fumes and aerosol sprays.

Animals — Cows can get sick from air pollution. So can dogs and cats. Be very careful not to use any kind of spray paint or bug killer near your pet. If even a small amount gets into an aquarium, all the fish may die.

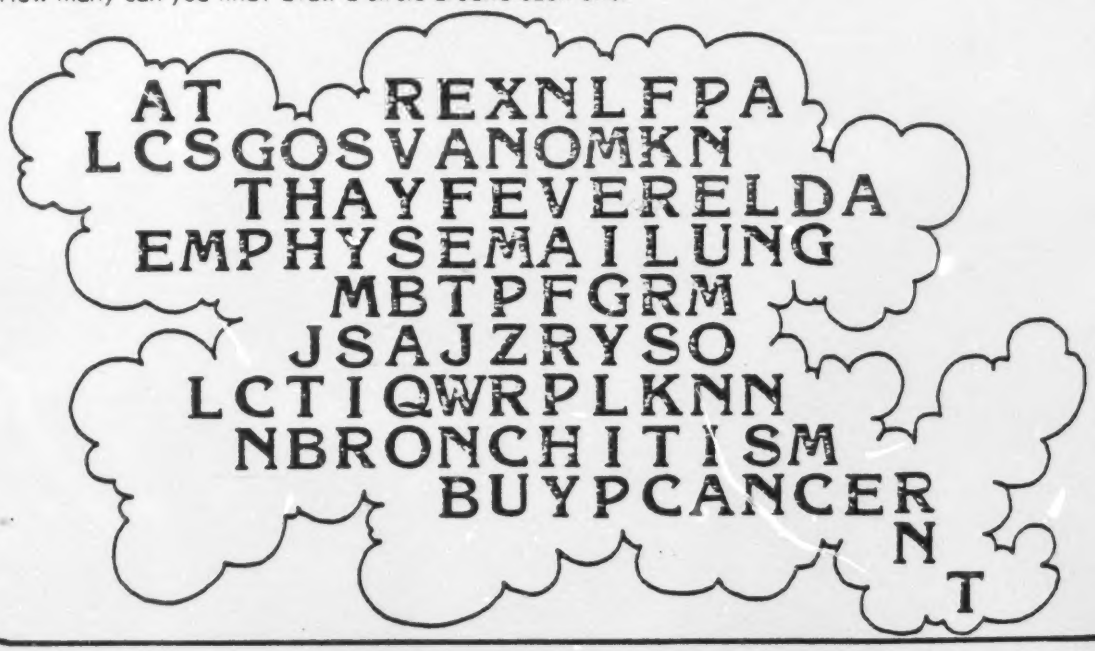
People — Air pollution can make your eyes water and burn. It can give you a bad headache or make you dizzy. Pollution in the air makes it easier for you to catch a cold or the flu. It makes everyone have a harder time breathing. So, pollution is especially bad for people who have breathing problems anyway, like hayfever or asthma (AZ - mah).

Air pollution hurts your heart and lungs. It especially affects people who have respiratory diseases like Emphysema (em - fa - ZE - mah) and Bronchitis (bron - KI - tis).

Lung Cancer can be caused by some of the poisons in the air. Every year, about 100,000 people die of lung cancer.

Pollution Jumble

All of the words we underlined above are inside the cloud of pollution. These are important words. How many can you find? Draw a circle around each one.



AMERICAN LUNG ASSOCIATION 1980

LESSON PLANS

CONCEPT/SKILL	TEST IMS	ESTIMATED TIME
Community Agencies	4.C.8	Two 45-minute periods

OBJECTIVE 4 - 3.1.2 Identify community agencies which are available to maintain health standards.

INSTRUCTIONAL MATERIALS:

3M Company, School Health Education Study, Concept 5, Level IV-A, "Transparencies F, G, H, I, J, P, and S." (masters included)
Textbook: Scott, Foresman and Company, You and Your Health: 4, pp. 177-179.
Booklet: City Of Jacksonville Information Services Division, Your Where To Call Guide (one for each student)
Activity Sheet: "Where To Call" (Make a copy for each student.)

PROCEDURE:

These transparencies deal with how and why community health organizations are formed and presents various types of community agencies and the programs they provide.

Show transparencies and use the following as a guide to discussion.

Transparency F
Do the people in this picture need to form an organization?
Why does it help to form an organization to solve a problem?

Transparency G
There are different types of organizations that work to improve or eliminate community problems. Professional organizations do not make money but establish good practices.
Can you think of an example of a professional organization? (American Medical Association, Consumer Affairs, J.T.A., Food and Drug Administration, Better Business Bureau, Center for Communicable Disease Control)
What is an example of a voluntary organization? (Heart Association, Lung Association, Cancer Society, March of Dimes, Easter Seal, Multiple Sclerosis, etc.)
Have you ever volunteered to help any of these agencies?

Transparency H
Official agencies are those agencies that get their support from taxes paid by citizens. They solve many health problems by establishing laws and regulations and seeing to it that people do them.
What are some examples of this type? (Public Health Department, Animal Control, Bio-environmental Control, Sanitation Department, Fire and Police Departments, Rescue Squad, Bureau of Vital Statistics.)
Other groups could include groups for profit.
What is the example given here?

OBJECTIVE 4 - 3.1.2

Transparency I
Some agencies exist for research. Examples of these are the National Institutes of Health, National Research Council-Food and Nutrition, Foundations such as Ford, Rockefeller, Carnegie and research hospitals such as Shands and Mayo. Have you ever heard of any of these?

Transparency J
Many agencies are not for profit but provide health services (hospitals, mobile screening units, visiting nurses, health clinics). Which do you recognize in this picture?

Transparency P
Sometimes industry is involved in research to improve health problems. What do you think the individuals in this picture might be trying to help solve?

Transparency S
Citizens form clubs to solve problems affecting our health. Do you know one in this community?

EVALUATION:

Distribute booklet "Where To Call Guide" and activity sheet "Where To Call." Instruct students to use the "Where To Call Guide" to find the agency and telephone number which deals with the problem listed.

ENRICHMENT/REINFORCEMENT:

Have students read pages 177-179 in You and Your Health, and list on paper eight ways the public health department helps the community.

Plan for a speaker from a community agency to visit your class.

TEACHER INFORMATION: These are services provided by the Consolidated City of Jacksonville. Speakers are available for your classes. Contact Health Education, Duval County Health Department, 633-5695, to discuss possibilities.

1. Environmental Health Services

   a. Investigation of sanitation complaints

   b. Civil Defense Training and cooperation

OBJECTIVE 4 - 3.1.2

c. Inspection of nursing homes, schools, child care centers, foster homes, homes for the aged, and hospital food services.

d. Inspection of food establishments, retail grocery stores, meat markets, and food processing plants.

e. Training of food handlers.

f. Inspection of dairies, milk processing, and frozen dessert plants.

g. Checking x-ray machines, microwave ovens, and other hazard products (for leakage of microwaves).

h. Inspection of common carrier watering points.

2. Sanitary Engineering

a. Checking private and public water systems with sample testing completed in the Division's laboratory.

b. Inspection of trailer parks and related septic tank plans and approval for issuing health permits.

c. Review plans for private water supply, sewage disposal system, and septic tank installation.

d. Inspection of swimming pools.

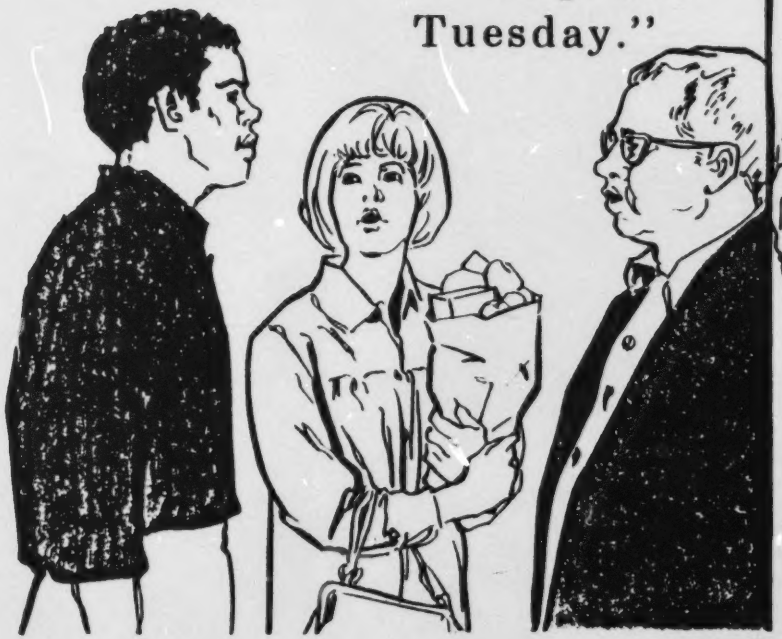
e. Inspection of common carrier watering points.

f. Investigation of sanitation complaints.

"Something must be done--but it's too much for just a a few."

"I'll call all my neighbors."

"Let's get together Tuesday."



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"With committees we can get something going..."

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Professional Organizations

Supported by Members

Establishing Professional Standards

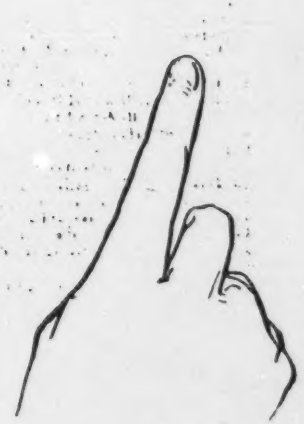
Sharing of Knowledge

Voluntary Organizations

Supported by Contributions

Focused on Specific Organ, Disease, or Health Program

Official Agencies



Supported by Taxes

Establish and Enforce
Laws and Regulations

Concerned With
Many Health Problems

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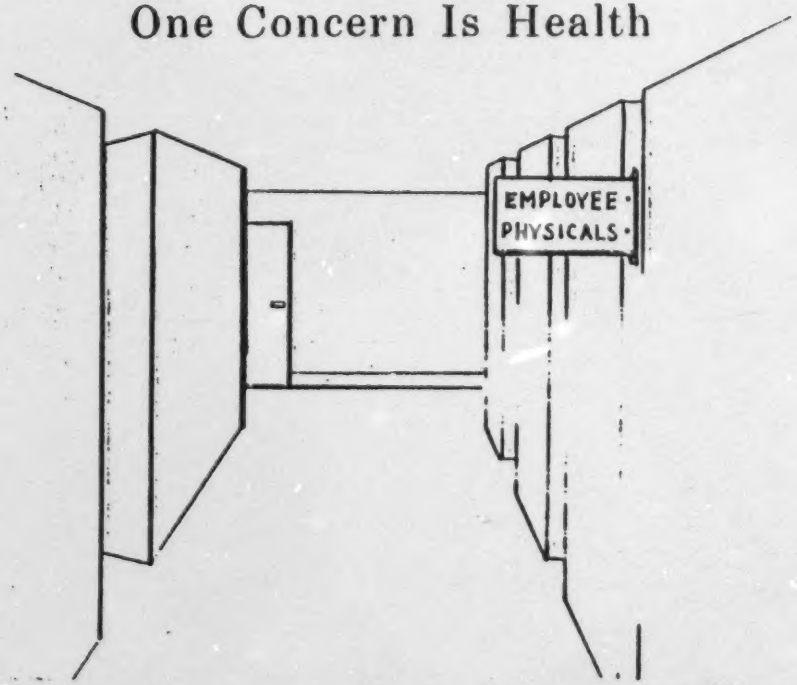
Other Groups

One Concern Is Health



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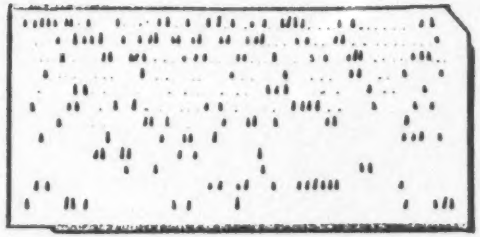
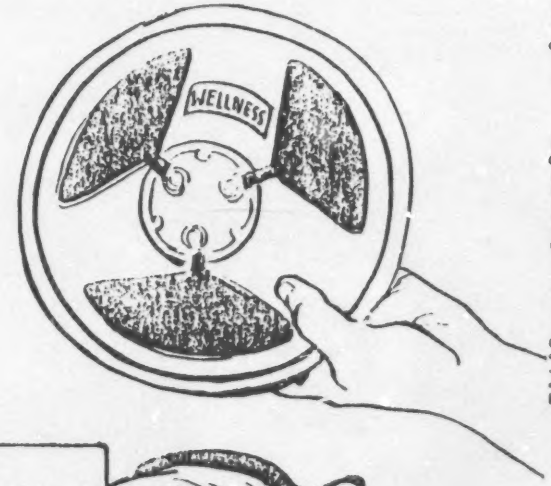
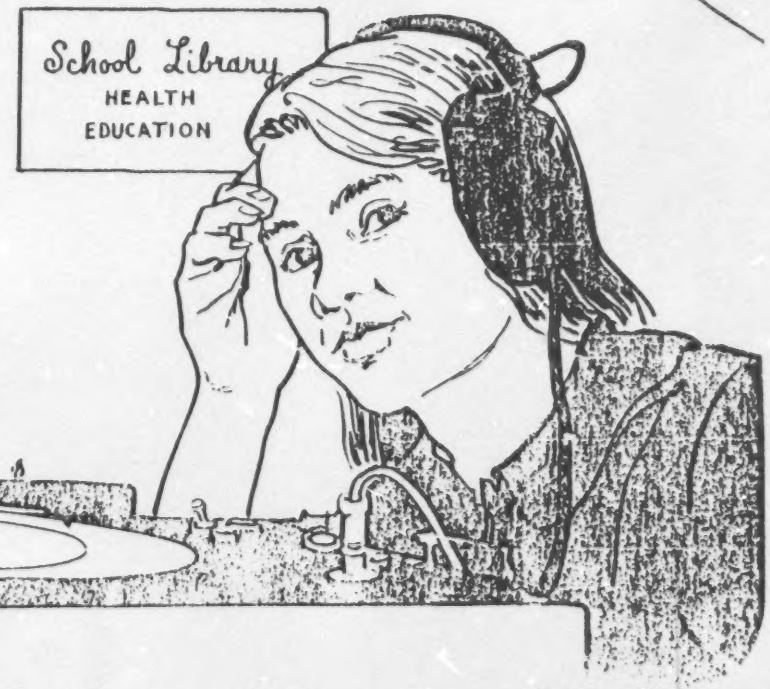
Research



Education





Services

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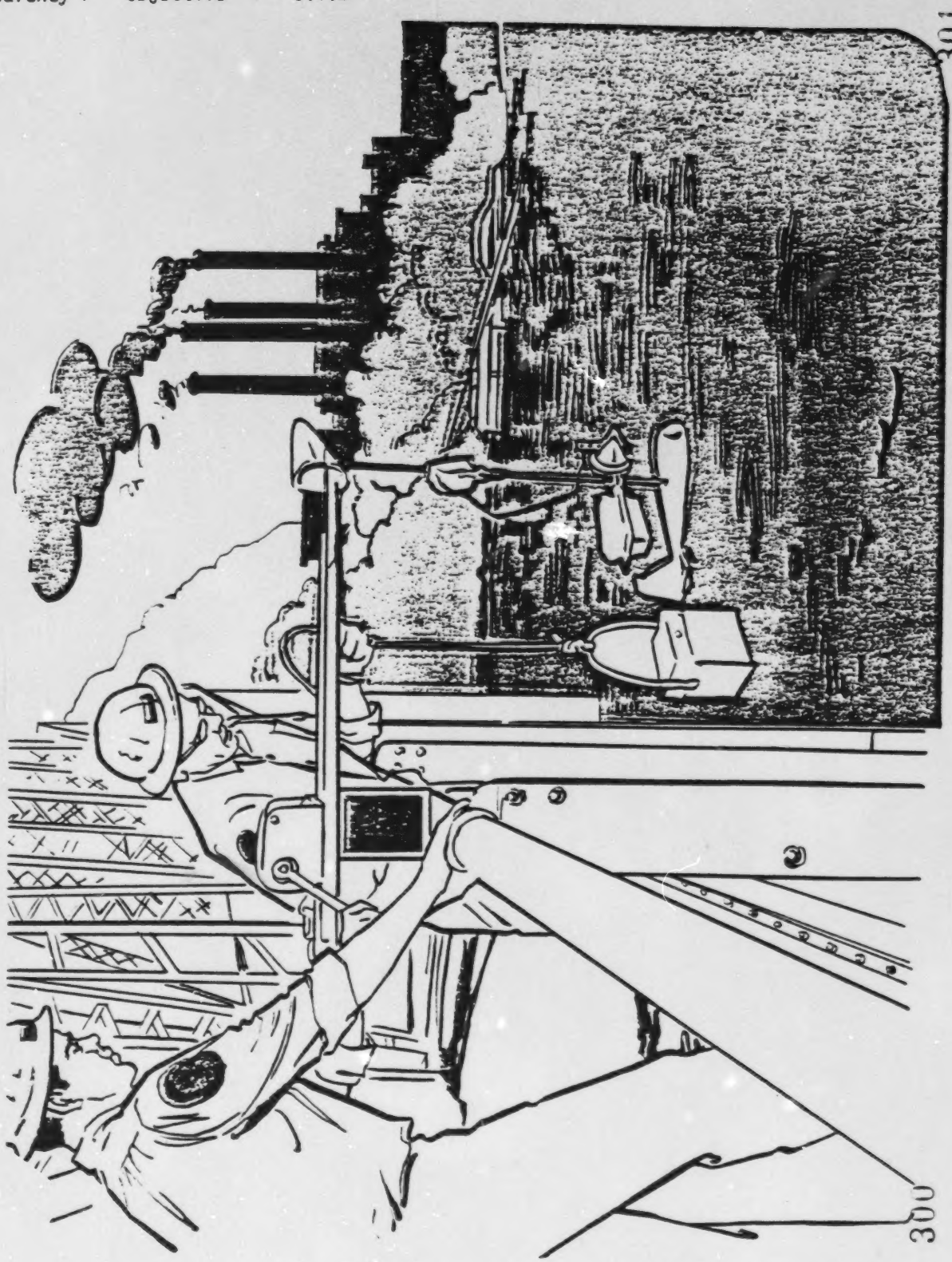
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Transparency S Objective 4 - 3.1.2

OBJECTIVE 4 - 3.1.2

ACTIVITY SHEET "WHERE TO CALL"

	AGENCY	TELEPHONE	PROBLEM
1.	_____	_____	You need help filling out a Social Security form.
2.	_____	_____	The electric power line is lying on the ground after a storm.
3.	_____	_____	Someone you know is thinking about suicide.
4.	_____	_____	You need something interesting to do with your time and you like good books and stories.
5.	_____	_____	You live on the Westside of town and you need to go to the emergency room for treatment of a broken bone.
6.	_____	_____	You are sixteen and need help finding a job.
7.	_____	_____	A person in your family needs to have a visit from a nurse.
8.	_____	_____	A dead animal is lying on the street by your house.
9.	_____	_____	You have been treated unfairly by a door to door salesman.
10.	_____	_____	You want to volunteer to help in the community.

OBJECTIVE 4 - 3.1.2

ACTIVITY SHEET KEY

1.	Social Security Administration	355-8811
2.	Jacksonville Electric Authority	633-5310
3.	Central Crisis Center	384-2234
4.	Hayden Burns Public Library	633-3567
5.	St. Vincent's Hospital Naval Air Station Hospital Greater Orange Park Community Hospital (Any of these three are correct)	389-7751 772-2201 264-1411
6.	Florida State Employment Service Youth Employment Service (either of these two)	358-2300 633-5090
7.	Visiting Nurses Home Health Services	356-6355 778-3660
8.	Animal Control Center	633-2434
9.	Better Business Bureau Consumer Affairs Division (either of these two)	396-1101 633-3940
10.	Volunteer Jacksonville	356-9471

LESSON PLANS

CONCEPT/SKILL	TEST	ESTIMATED TIME
Community Agencies	4.C.7, 4.C.8	Two 45-minute periods

OBJECTIVE 4 - 3.1.3 Demonstrate cooperation in solving a community health problem.

INSTRUCTIONAL MATERIALS:

Booklets: Florida Power and Light Company, 32 Ways You Can Fight Pollution.
Florida Electric Authority, ENERGY CRISIS.
Textbook: Scott, Foresman and Company, You and Your Health: 4, pp. 180-202.

PROCEDURE:

In this lesson students will work together to solve a health problem affecting the community. Two sample problems are given, however a health problem in the school may be identified. You and Your Health textbook material is a useful resource for problems of air, water, food, and noise pollution, and adequate housing. Use "ENERGY CRISIS" as a resource for energy problems and "32 WAYS TO FIGHT POLLUTION" as a resource on pollution.

Sample problem 1 - Develop an energy program and recommend energy policies for the school.

Sample problem 2 - Develop a pollution control program and recommend ways to fight pollution in your school.

Have students research the following aspects of the problem they have chosen.

1. What is the problem and how does it affect the future?
2. What are the cost considerations?
3. How does it affect our health?
4. What can be done to reduce the effects of the problem?
5. What can be done to solve the problem?
6. Whose support do you need?
7. What kind of agency might need to be established? (federal, state, local, voluntary).
8. What laws will be needed for funds and to enforce policies?
9. What will need to be done to educate the public (school) about the problem?

Form a committee to solve the problem. Delegate research to be done.

EVALUATION:

Have students conduct a meeting and report on the results of their research. Establish a plan for solving the problem.

OBJECTIVE 4 - 3.1.3

ENRICHMENT/REINFORCEMENT:

Conduct an education program in your school. Include posters with suggestions as to how to reduce or solve the problem. Make a public announcement on the loud speaker along with the morning announcements.

Write letters to responsible persons regarding their support in solving the problem.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

Performance Objective		Instructional Implications		Resources	
Number	Topic	Teaching Time	Tested on	County Adopted Texts	Other Resources
4 - 1.1	Organs of the body function in harmony.	2-3 weeks	Health Test	Julius B. Richmond, et al, You and Your Health 4, (Glenview, Illinois, Scott, Foresman and Company, 1981). pp. 36-69. Julius B. Richmond, et al, You and Your Health 4, (Glenview, Illinois: Scott, Foresman and Company, 1977). pp. 36-69. James P. Barufaldi, Heath Science: 4, (Lexington, Mass.: D. C. Heath and Company, 1981). pp. 78-107.	TEXTBOOKS Julius B. Richmond, et al, Health and Growth: 4,(Glenview, Illinois: Scott, Foresman and Company, 1971). pp. 7-30. TRANSPARENCIES 3M Company, School Health Education Study, Concept I, Level II, Objective B. FILMSTRIPS SVE, Slim Goodbody, Your Body, Health and Feelings. + Eye Gate, How Your Body Parts Function, Part I. "The Brain." "The Heart." "The Stomach." "The Intestines and Pancreas." Part II, "The Lungs and Larnyx." Part III, "The Liver."

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KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

Performance Objective		Instructional Implications		Resources	
Number	Topic	Teaching Time	Tested on	County Adopted Texts	Other Resources
4 - 1.1	Organs of the body function in harmony	2 3 weeks	Health Test		FILMS Health in Balance. * Our Wonderful Body Series. * "The Heart and Its Work." "How Its Parts Work Together."

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KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

Performance Objective		Instructional Implications		Resources	
Number	Topic	Teaching Time	Tested on	County Adopted Texts	Other Resources
4 - 2.1	The digestive process is a total body function.	2-3 weeks	Health Test	Richmond, (4, 1981), pp. 46, 100-107. Richmond, (4, 1977), pp. 46, 101-107.	TEXTBOOKS Richmond, (4, 1971) pp. 10-11, 56-86 BOOKS Department of Agriculture, What's to Eat, and Other Questions Kids Ask About Food. ** PAMPHLETS Food Is More Than Just Something To Eat. ** Mr. Peanut's Guide to Nutrition. Standard Brands Educational. ** ARTICLES "Reader's Digest," (reprints), "I Am Joe's Stomach." "I Am Joe's Intestine." "I Am Joe's Liver." "I Am Joe's Pancreas."

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KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

Performance Objective		Instructional Implications		Resources	
Number	Topic	Teaching Time	Tested on	County Adopted Texts	Other Resources
4-2.1	The digestive process is a total body function.	2-3 weeks	Health Test		FILMSTRIPS Eye Gate, How Your Body Parts Function, Part I "The Stomach." "The Intestines and Pancreas." Part I "The Liver." BFA, Food and Us. Random House, What Happens to a Hamburger. National Dairy Council, Toothtown, U.S.A. FILMS Mechanics of Life* "Digestion and the Food We Eat." Digestion In Our Bodies.* You-The Living Machine.* Better Breakfast.* Food and Growth.* FIELD TRIPS Jacksonville Museum of Arts and Sciences.

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KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

Performance Objective		Instructional Implications		Resources	
Number	Topic	Teaching Time	Tested on	County Adopted Texts	Other Resources
4-2.2	Students will apply scientific principles in selecting health products and services.	2-3 weeks	Health Test	Richmond, (4, 1981), pp. 90-92, 176-206. Richmond, (4, 1977), pp. 90-92, 174-207.	TEXTBOOKS Richmond, (4, 1971), pp. 81-82 BOOKS Department of Agriculture, What's To Eat, and Other Questions Kids Ask About Food.** PAMPHLETS Opthalmologist, Oculist, Optometrist, Optician, National Society for the Prevention of Blindness, Inc.** TRANSPARENCIES 3M, School Health Education Study, Concept 8, Levels II-B, III-A, IV-C. KITS Osceola County School Bistrict, Project SCAT. FILMSTRIPS National Dairy Council, Label It Nutrition

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KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

Performance Objective		Instructional Implications		Resources	
Number	Topic	Teaching Time	Tested on	County Adopted Texts	Other Resources
4-2.2	Students will apply scientific principles in selecting health products and services.	2-3 weeks	Health Test	Richmond, (4, 1981), pp. 90-92, 176-206. Richmond, (4, 1977), pp. 90-92, 174-207.	FILMS Analyzing Advertising Nutrition: The Consumer and the Supermarket.*

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KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

Performance Objective		Instructional Implications		Resources	
Number	Topic	Teaching Time	Tested on	County Adopted Texts	Other Resources
4-2.3	The use of mood modifiers affects body functions.	2-3 weeks	Health Test	Richmond, (4, 1981), pp. 22-24, 115. Richmond, (4, 1977), pp. 90-92, 115.	TEXTBOOKS Richmond, (4, 1971), pp. 7, 81-82. PAMPHLETS Some Substances Used for Non-prescribed Drugging Effects, Pharmaceutical Manufacturers Association.** L.S.D., Some Questions, and Answers, National Clearinghouse for Drug Abuse Information.** Drug Abuse Prevention, Department of HEW.** Alcohol, Do You Know Enough About It? Addiction Research Foundation. Foundation.** Drugs and You, Channing L. Bete, Company, Inc.** The Way To Go, Kemper Insurance Companies.** Drugs and Your Safety, Scott, Foresman.**

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KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

Performance Objective		Instructional Implications		Resources	
Number	Topic	Teaching Time	Tested on	County Adopted Texts	Other Resources
4-2.3	The use of mood modifiers affects body functions.	2-3 weeks	Health Test		Let's Talk About Drug Abuse, National Institute on Drug Abuse, HEW.** Don't You Get Hooked, HEW.** Even The Longest Filter Doesn't Help Much, HEW.** PCP, Do It Now Foundation.** Quaaludes and Sopors, Do It Now Foundation.** Downer Drugs, Do It Now Foundation** Junk and You, Do It Now Foundation** TRANSPARENCIES 3M Company, School Health Education Study, Concept 9-A, Level II** KITS American Cancer Society, Health Networks Special People."**

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KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

Performance Objective		Instructional Implications		Resources	
Number	Topic	Teaching Time	Tested on	County Adopted Texts	Other Resources
4-2.3	The use of mood modifiers affects body functions.	2-3 weeks	Health Test		FILMSTRIPS Marsh, Drug Education Series. "Drug Abuse, Who Needs It." "Drugs, Friend or Foe." Educational Activities, Inc., Smoking and Children. FILMS Drugs Are Like That.* Health In Balance.*

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KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

Performance Objective		Instructional Implications		Resources	
Number	Topic	Teaching Time	Tested on	County Adopted Texts	Other Resources
4-3.1	Community efforts help reduce health problems.	2-3 weeks	Health Test	Richmond, (4, 1981), pp. 180-206. Richmond, (4, 1977), pp. 174-207. Barufaldi, (4, 1981), pp. 172-173	TEXTBOOKS Richmond, (4, 1971), pp. 174-202. BOOKS Air Pollution Primer American Lung Association.** PAMPHLETS Air Pollution - The Facts About Your Lungs, American Lung Association.** Your Where To Call Guide, City of Jacksonville Information Services Division.** 32 Ways You Can Fight Pollution Florida Electric Authority.** Energy Crisis, Florida Electric Authority ** Air Pollution Explained: Pollution And Your Health, Florida Lung Association.**

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KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

Performance Objective		Instructional Implications		Resources	
Number	Topic	Teaching Time	Tested on	County Adopted Texts	Other Resources
4-3.1	Community efforts help reduce health problems.	2-3 weeks	Health Test		Air Pollution and Health, Christmas Seal Association.** Don't You Dare Breathe That Air! Florida Lung Association.** It's Your Problem: Air Pollution, Florida Lung Association.** As You Live You Breathe,** American Lung Association A Glossary On Air Pollution, American Lung Association.** TRANSPARENCIES 3M Company, School Health Education Study, Concepts, Level II-D*, IV-A.+ KITS Lung Association, Lungs Are For Life.**

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KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

Performance Objective		Instructional Implications		Resources	
Number	Topic	Teaching Time	Tested on	County Adopted Texts	Other Resources
4-3.1	Community efforts help reduce health problems.	2-3 weeks	Health Test		FILMS A Community Keeps Healthy.* Your Friend, The Water.* Water, Friend or Enemy.* Who Wants America Ugly?*

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